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ECONOMIC AND INDUSTRIAL AFFAIRS

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MONETARY AND FINANCIAL PROBLEMS IN CEMA VIEWED

Budapest KULGAZDASAG in Hungarian No 9, Sep 79 pp 27-37

[Article by Kalman Pecsí: "Timely Problems of the Monetary and Financial Conditions Within CEMA"]

[Text] The CEMA countries' international monetary system is developing under the influence of internal (within the system) and external (outside the system) factors. The internal factors play the main, the decisive role in the system's functioning and development. These factors are: the planned nature of the economic processes, the internal factors of economic growth, the growth of the national economies and their structural equilibrium. The monetary and credit mechanism is an integral part of the mechanism of mutual economic cooperation. Changes in the conditions of cooperation necessitate the continuous and purposeful perfection of the monetary-financial mechanism, taking into consideration that any development of the monetary mechanism must be synchronized with the other means of the economic relations' planned and coordinated development.

Among the conditions for the planned organization of the CEMA countries' external economic conditions, the monetary-financial means do not determine the strategy of cooperation. But at the same time they must enhance the development of external economic relations. The present monetary-financial mechanism does not fully satisfy the mentioned conditions. This is evident primarily in the lack of harmony between the long-range objectives of cooperation and the monetary mechanism's set of economic instruments. Proof of this are, among other things, the failure to solve the system of longer-range (longer than five years) trade agreements among the CEMA countries, the absence of a suitable mechanism for the international coordination of national investments, the inadequate harmony between the long-range specialization agreements and the short-term [programs] that permit their implementation, and the short-term nature of the balancing and crediting procedures for clearing in transferable rubles.

Simultaneously, the CEMA monetary system is a component and integral part of the world monetary system. Such factors as the capitalist monetary system's crisis, intensification of the raw-material and fuel problems, and

the growing activity of third-world countries significantly influence the development of the CEMA countries' monetary-financial system. In perfecting the system it is necessary to take more and more comprehensively and consistently into consideration the influence of the forces within and outside the system. This is motivated by the following economic and political factors:

The most essential economic condition is the difference that exists since the early 1950's between the quality and efficiency levels of commodities traded within CEMA and on the world market. For this reason there appears a dispreference for internal commodities in trade within CEMA, and an attraction for commodities that meet the quality of the external markets. This compels the internal trade policy of CEMA to strive for increasing the rigid balancing of trade by commodities and commodity groups.

The enterprises are oriented to the CEMA market in the export of manufactured goods, but to the external market in the import of such goods. This fact compels the internal economic mechanisms--in the interest of preserving balance-of-payments equilibrium--to adopt various economic and administrative measures that lead to the formation of contradictory and intricate systems of interest.

CEMA is an open organization, and hence third countries have an opportunity to join it. The most essential question of every accession is the attainment of equivalence in monetary relations.

And finally, it follows from the concept of peaceful coexistence that it is unavoidable to urge a new, rational international monetary system and to participate in its formation. The economic aspect of this is determined by the requirements of peaceful economic competition; and its political aspect, by the need to make socialism more attractive.

The factors within and outside this system are affecting more and more intensively the CEMA countries' economic cooperation. At the same time, however, the system of monetary-financial relations has remained unchanged. This fact hampers, both in terms of the planned time limits and in general, implementation of the tasks for raising economic effectiveness, for the expansion of external economic relations, and for perfecting the monetary system.

In the present article I will attempt to formulate my views regarding the new phenomena that have arisen in the CEMA countries' mutual monetary and trade relations, and in their relations with third countries in this field. I will start first of all with the new general phenomena that should be taken into consideration when defining, under the present conditions, the direction and specific ways of developing the CEMA monetary system.

#### 1. New Phenomena in the General Economic Conditions of Cooperation

1. In their economic policies, most CEMA countries are in a stage of transition from extensive to intensive development. The reserves of manpower and of production's extensive growth have been exhausted. Transition to

intensive development is accompanied by a decline of the rate of economic growth. In the individual countries this transition is taking place with different qualitative characteristics and in different periods of time, which is raising a series of new problems within economic cooperation.

Intensification of the economic processes, practical application of the results of the revolution in science and technology, and the external markets' higher quality specifications are compelling the countries to rapidly seek the most rational ways of improving effectiveness and quality. The national economic systems' adaptation to present-day requirements is proceeding full force, but the uniformity, and in many instances even the similarity, of the ways to intensification, and of the set of economic instruments suitable for this purpose, is not ensured. This road of development makes increasingly obvious that perfection of the monetary and credit mechanism--and of commodity and money relations in general--is lagging behind the requirements for the intensification of the external economic processes.

2. The present stage in the development of economic cooperation is characterized by a changeover to new forms of integration, by the production sphere's gradually expanding role in cooperation. The growing scale and complexity of the tasks, the increasing long-term nature of cooperation necessitate that the participating countries unify their efforts and utilize the community's resources more and more rationally and effectively. The long-range target programs developed for the key branches of material production serve these objectives. These programs--in accordance with the concepts--define the purposeful ways of efficiently developing certain inter-related production complexes.

The large volume and long-term nature of the objectives set in the programs necessitate that objective evaluation be possible, and the parameters necessary for sound economic decisions be available, throughout the entire process of coordinating the planning of the target programs, i.e., in the individual stages of drafting the plans and of their implementation.

Three problems arise in the monetary-financial sphere in conjunction with the long-range target programs. First, the establishment of realistic relationships between currencies, i.e., the comparability of the forecast and planned costs and results. Secondly, making available the financial resources necessary for the realization of the target programs, by mobilizing our own resources and through the inclusion of resources from third countries. Thirdly, perfection of the system of international clearing in conjunction with foreign trade, so that the valuation of large-scale and long-range deliveries in foreign trade may be realistic, and to ensure that the countries' debits and credits will retain their real value.

3. CEMA is expanding geographically and territorially, partially through the accession of new members (Vietnam, Cuba) and partially through the expansion of the circle of countries that maintain a special relationship with CEMA (Yugoslavia, Finland, Iraq, Mexico, Laos, Angola, Ethiopia). Thus CEMA must organize a rational division of labor that will satisfy countries at different levels of economic development.



Growing differentiation of this kind in economic cooperation raises new problems in multilateral monetary-financial cooperation:

The multilateral financial and technical assistance that the economically less developed countries require must be combined with their inclusion in the present forms of the international socialist division of labor. It is necessary to adapt to this the volume, forms and structure of assistance, and the recycling of the resources from the credit granted.

The question arises as to how much interest there is among countries at different levels of economic development in perfecting CEMA's international monetary system. Their standpoints may differ, depending on whether the strategy of their economic development is extensive or intensive.

4. In the early 1960's, significant changes occurred in the structure of world trade, and in the levels and ratios of the world-market prices. These processes triggered rapid and uneven changes in the process of inflation within the capitalist world, which led to the depreciation of currencies at different rates and to the rapid rise of export prices in capitalist trade. Amidst these conditions the CEMA countries switched to the method of sliding prices in the formation of their contractual prices.

The rise in contractual prices triggered by world-market factors created certain difficulties in the balancing of mutual trade, in planning the exchange of goods, and in the realization of joint investments. In the monetary-financial sphere these factors are reflected in the growing imbalance of payments, in the change in the direction of the flow of credits between countries, and in the problem of preserving the transferable ruble's real value.

5. Lately, economic relations with the developed capitalist countries have expanded considerably, in terms of the traditional forms of such relations (trade, credits) as well as of their new forms (industrial cooperation, compensation deals, scientific-technical cooperation). The objective basis for the expansion of these relations is the process of the economy's internationalization, the efforts to master more rapidly the results of the revolution in science and technology. East-West trade at present is developing at a faster rate than world trade and the CEMA countries' mutual trade. The CEMA countries' growing import has led to balance-of-trade deficits in most countries in relation to the industrially developed countries. The latter are financing these deficits with credit.

The expansion of economic relations with the developing countries is likewise a factor that, under the present conditions, affects the nature and conditions of the CEMA countries' cooperation. The CEMA countries' growing interest in fuels and raw materials from the developing countries would require the coordination of trade and economic policies in relation to these countries. The fact that the export structures of the two groups of countries are similar in many respects would require the multilateral coordination of economic and trade relations, and the development of their varied

forms. In this context it is of special significance to ensure the multilateral clearing of payments between the developing countries and the CEMA countries.

## 2. Situation, New Phenomena of the CEMA Countries' Mutual Payment and Credit Relations

### 2.1 Present State of International Settlements

Mutual payments within the transferable-ruble clearing system are important elements of the mechanism of socialist integration. The nature of the settlements is determined by the nature of the trade turnover between countries; the settlements are secondary. At present the balancing of mutual trade is achieved on a bilateral basis. These efforts of the countries narrow the money equivalent's function as the value form's independent medium, assigning it merely an accounting function. The fact that the money functions of the transferable ruble are not developed leads to barter and intensifies the countries' efforts to link commodities (hard, and soft commodities) in their mutual trade. The bilateral linking of commodities in mutual trade results in that the valuations of the arising net balances differ. Thereby the uniformity of valuation declines on the CEMA countries' international market, and thus the feasibility of transferring the net balances arising in transferable rubles, as well as the related multilateral credits, are limited.

The transferable-ruble clearing system's functioning to date has not made possible the realization of multilateralism in mutual trade and payments. The proportion of the multilateral clearing of annual mutual payments remains unchanged at 3 percent of the total volume of trade and payments.

The monetary sphere's present level makes it cumbersome to unify the CEMA countries' exchange-rate systems. The present practice is characterized by the diversity and multiplicity of instruments for the conversion of foreign currencies. The number of currency-conversion instruments is noticeably increasing with the number of joint integration measures. They lack some sort of inherent uniformity, because they are computed on the basis of various methods. Therefore it is impossible to create a uniform, integrated system of monetary parameters that would permit comparability on a uniform basis, and thereby comparability of the costs and results measured in different currencies. The absence of monetary parameters becomes apparent particularly when a joint program has to be realized on a multilateral basis. Therefore it is a very timely and important task to seek new possibilities for clarifying the exchange-rate ratios between the national currencies and the transferable ruble.

The inherent difficulties of the CEMA countries' clearing system (its closed nature, bilateralism, the transferable ruble's limited transferability, the employed conversion factors' diversity and lack of uniformity) affect the interest of third countries in the multilateral clearing system based on the transferable ruble. The CEMA countries' economic cooperation with these countries demands the perfection and expansion of the clearing system.



## 2.2 Development of the CEMA Countries' Credit Relations

International credits between CEMA countries are realized at present usually in simple commodity form. The international banks' role in implementing credits is limited basically to accounting and record-keeping functions in the case of commodities supplied on credit. The money form of CEMA international credits has not developed and is apparent only in the case of credits provided in the currencies of the capitalist countries. The relatively weak growth of the money form of international credit can be attributed to the fact that in practice the transferable ruble--the basic instrument of mutual clearing--is not an independent instrument in the process of transferring value but merely reflects in the records the commodity turnover between countries.

Mutual trade has been and remains the basic area for the application of international credit. The credit relations in this field reflect the basic characteristics of the bilateral trade that has evolved between CEMA countries.

Significant changes are occurring at present, and will occur in the coming years, in the credit relations between CEMA countries. This is the most obvious in the credit relations between the Soviet Union and the other CEMA countries. Due to the higher contractual prices resulting from world-market effects, the Soviet Union's balance-of-trade surplus in relation to the other CEMA countries has reached a huge amount. The Soviet Union is offsetting this surplus by granting the other countries so-called long-term consolidation credits. And the decline in the transferable ruble's purchasing power due to rising world-market prices has led to the emergence of negative interests on long-term credits.

The higher contractual prices have produced a new phenomenon in investment cooperation among the CEMA countries. The Soviet Union is the principal supplier of products in which the CEMA countries are interested, and hence it is the principal borrower of long-term investment credits. But the higher contractual prices have produced a significant net surplus in the Soviet Union's balance of trade with the other CEMA countries, and the Soviet Union has changed from debtor to creditor. Thus the further financing of investments on the territory of the Soviet Union, by the other CEMA countries in transferable rubles, has become irrational. In many instances the participating countries settled their deliveries for the given projects within the framework of their annual normal trade turnover, instead of supplying the Soviet Union on long-term credit. In the process of investment cooperation, therefore, credit relations between the Soviet Union and the other CEMA countries have been replaced--partially and temporarily--by commercial relations. Under the new conditions the General Agreements for joint investments on the territory of the Soviet Union temporarily call for the clearing of the necessary deliveries within the general trade turnover.

A characteristic feature of the General Agreements now being concluded is the provision that once the total price of the products supplied from the

completed plant exceeds the total price of the special-purpose deliveries made earlier by the parties participating in the plant's construction, then the supplier may require that further shipments of the products--mostly raw materials and starting materials--be offset by shipments of specific commodities. Which means that the supplier has the right to select the commodities he recognizes as suitably hard to offset his products. This is warranted according to the logic of the present system, but it leads to the further reinforcement of barter in mutual trade, strengthens bilateralism and does not enhance the development of cooperation's mediums of value.

The rise of barter in mutual trade, the new phenomena in the financing of investment cooperation affect the significance of the socialist international banks. Under these conditions the problem of financing integration measures multilaterally becomes more complicated, because the possibility of mobilizing and utilizing monetary resources becomes more limited.

### 2.3 Economic Content and Role of the Transferable Ruble's Exchange Rate in Relation to Capitalist Currencies

The transferable ruble's exchange rate in relation to the capitalist currencies plays a significant role among the instruments of the CEMA countries' integration mechanism.

This exchange-rate ratio manifests itself in three basic spheres (foreign trade and credit relations; the economic mechanism of the countries' external economic activities, and monetary and bank transactions with third countries in transferable rubles; and economic relations).

The effect of a change in the transferable ruble's exchange rate is not unambiguous for all countries: the change may have a positive effect in certain spheres of external economic relations, and a negative effect in others. But from this point of view it is significant that the final effect will generally depend on the countries' payments position (whether the given country is a net creditor or net debtor nation) and on how the transferable ruble's upward or downward revaluation affects the net debit or credit balance, with due consideration for the structure of the mutual credits and debits.

At present we are not utilizing adequately the regulating possibilities of the transferable ruble's exchange rate. To a significant extent this is related to the fact that the theoretical views regarding the economic role and functions of the transferable ruble's exchange rate have not been elaborated, its position and significance in socialist integration's set of economic instruments have not been clarified, and its level has not been substantiated economically.

The present relative stability of the transferable ruble's exchange rate is accompanied by the importation of instability stemming from a wide circle of external economic forces, and this influences the interest of the individual CEMA countries and their enterprises in joint realization of integration measures. In addition, failure to utilize the possibilities

inherent in regulating the exchange rate places a significant burden within the national economic mechanisms on the systems for regulating the relationship between the internal and external markets.

The method that the NGEB [International Bank of Economic Cooperation] employs for modifying the exchange rate takes into account the changes in the capitalist currencies' market value that do not always reflect--due to intervention by the capitalist central banks and to other state-monopoly interventions--the changes occurring in the levels of the export and import prices. This method of computing the changes in the transferable ruble's exchange rate may be regarded as perfect only in the sphere of banking operations. Pricing practice would require exchange-rate ratios that reflect the purchasing power of the currencies and thus react on the stability of the contractual prices' average level.

It may be assumed that two methodological basic elements must be clarified for determining the transferable ruble's exchange rate: the methods for determining the exchange rate's level in relation to the capitalist currencies, and the methods for continuously changing this level.

#### 2.4 Problems of Preserving the Transferable Ruble's Real Value

A relatively new economic question within CEMA is the problem of preserving the transferable ruble's real value. The changes in the transferable ruble's purchasing power caused by rising contractual prices lead to the depreciation of the CEMA countries' mutual debits and credits, of the funds and credits of the International Bank of Economic Cooperation and of the NBB [International Investment Bank] as well as of the international associations' and enterprises' assets expressed in the collective currency. This phenomenon is causing difficulties in long-term crediting where the credits provided in transferable rubles depreciate while they are being drawn as well as during repayment. Under these conditions the declining purchasing power of the transferable ruble makes the equivalent repayment of material and monetary resources difficult for the interested countries. The method that the International Bank of Economic Cooperation employs for determining the transferable ruble's exchange rate in relation to the capitalist currencies does not ensure the stability of the transferable ruble's purchasing power but merely registers the changes in the capitalist currencies' market value.

Actually the policy on the transferable ruble's exchange rate in relation to the capitalist currencies can provide protection only against the inflationary effects penetrating from the world market. Preservation of the transferable ruble's real value can be achieved only by a series of comprehensive measures that employ, in addition to the transferable ruble's exchange rate, also other instruments for the stabilization of purchasing power. (Such instruments might be: 1. In the case of commodities shipped in partial repayment of credits, the application of the same price ratios as were in effect at the time when the credit was drawn; 2. The application of the indexing method to deposits or in the case of commodities that are of key significance from the viewpoint of economic development; 3. Changing the interest level in conjunction with the economic content of the provided credits and with the developing economic conditions.)

## 2.5 Problem of Noncommercial Payments

Noncommercial payments within CEMA now account for 2 to 3 percent of the total volume of payments, and since 1963 they have been settled within the framework of a clearing system that, in a relative sense, functions independently. The sphere of noncommercial payments is the only one where real exchange of currencies occurs, and where in the final outcome the owners of national currencies are able to buy for another country's currency the goods and services that they need.

Equivalence is the most important problem of noncommercial payments between CEMA countries. Its basic prerequisite is the economic substantiation of the employed exchange rates and conversion factors. The methods for determining them, and for their subsequent correction, must be perfected.

It has become evident particularly in recent years that the forms in which the national currencies function in the noncommercial sphere, and the related methods of clearing international payments do not adequately serve the needs of mass tourism. "Black market" phenomena can be experienced in some CEMA countries, and because of this there is a noticeable increase of administrative intervention by the exchange authorities. The appearance of illegal foreign-currency transactions indicates a certain contradiction between reality and the present system of regulating noncommercial payments.

The mechanism for clearing noncommercial transactions was developed in 1956-1957, at a time when tourism between CEMA countries was relatively undeveloped. In accordance with the methods adopted at time, the noncommercial rates of exchange were determined on the basis of purchasing-power parity that reflected the retail-price ratios between individual countries, based on a specified mix ("basket") of goods and services. Conversion of the noncommercial transactions' net balances into transferable rubles likewise was solved with due consideration for purchasing-power parity between the transferable ruble and the national currencies.

This method of computing the noncommercial exchange rates essentially started out from the tourists' probable consumption. But it does not take into consideration the factors of surpluses or shortages on the domestic market and is insensitive to changes in the supply and demand for certain goods and currencies.

Now that international tourism between CEMA countries has assumed mass proportions, it has become necessary to seek new methods for determining the noncommercial exchange rates, methods that take into account the supply and demand for the individual currencies and are sensitive for ensuring the commodity base. Such methods could much better enhance the development of mass tourism between countries and simultaneously would permit regulation of the invisible items of foreign trade, within certain limits, primarily by economic methods.



## 2.6 Use of Convertible Currencies in Mutual Payments

In addition to the transferable ruble, also convertible currencies are used for the settlement of mutual payments between CEMA countries. In mutual trade these currencies are used primarily in conjunction with shipments of fuels and materials, and modern machinery and equipment, and they play a role also in mutual credit relations.

The use of convertible currency within CEMA is realized within the following basic forms: 1. Direct settlement of commodity trade in convertible currency, on the basis of world-market prices. Such settlements generate mutual interest in deliveries in cases when other forms of settlement are unsuitable for this. Simultaneously the restrictive effect of tradition bilateral clearing upon commodity trade is reduced, and in the course of this there can be a further expansion of mutually advantageous socialist international division of labor. 2. Indirect settlement in convertible foreign exchange, in conjunction with the transfer of capitalist import to socialist export. Realization of the revolution in science and technology, and the CEMA countries' increased ability to compete necessitate the constant expansion of import from the world market. It may be forecast that the proportion of import from third countries will increase within the final demand of the individual countries as well as in their export to other CEMA countries. 3. Ever-wider application of convertible currency in mutual credit relations. By making possible the independent movement of currencies, this will help to eliminate the unfavorable phenomena of commodity-linking credit.

The appearance of convertible currencies in CEMA's internal clearing system reflects the fact that the CEMA countries' mutual economic cooperation cannot dispense with these currencies. The practice of using convertible currencies directly affects current economic policy. The evolved situation requires comprehensive analysis, primarily for the purpose of correctly evaluating its possible impact, and for acting on this basis to further perfect the clearing system.

## 3. Problems in Development of Monetary and Credit Relations With Third Countries

The CEMA countries are expanding their economic relations with the developed capitalist countries and the developing countries as well. They are maintaining lively and everyday contact with the capitalist money markets. Lately the relations maintained with the capitalist monetary sphere have increased, in both their volume and proportion.

We distinguish three basic areas of contact with the international money markets. These are:

The individual CEMA countries' relations with capitalist and developing countries;

Relations with the capitalist money markets at the community level; and

Relations of the CEMA payments system and individual CEMA countries with the world monetary system (For example, the International Monetary Fund).

### 3.1 External Borrowing by CEMA countries

Since the early 1970's the external resources used by the CEMA countries have increased significantly. Analysis of this process is absolutely essential for, among other things, the coordinated creation of the export potential that is indispensable from the viewpoint of servicing these debts. At the same time we must analyze the relative advantages of the depreciation occurring on the capitalist money markets, the rise in interest levels and the possibilities of using the borrowed resources effectively. It will be expedient to evaluate how realistic are the various forecasts of total indebtedness, to critically analyze the information of the international money-market circles, and to forecast the stimulating effect of external debts on the individual countries' economic growth and on CEMA cooperation.

Increased borrowing is effective only if the debt is serviced from economic export. The structure of the CEMA countries' export potential to third countries is not the optimal from this point of view, and to a certain extent it lags behind the CEMA countries' economic and industrial potential. It would be expedient to jointly develop the strategy for modernizing the export structure. Actually this involves a new wave of industrialization for which the CEMA countries, in their efforts to achieve a specific export expansion, must develop new schemes of specialization and cooperation, in accordance with the mentioned requirements.

The possibility arises also of developing a coordinated strategy for further borrowing. In this context it is necessary to take into consideration the advantages that might arise from the socialist community's great weight on international money markets. And finally it will be expedient to examine whether it is necessary to develop a coordinated system of mutual guaranties for large-scale credit transactions.

### 3.2 Clearing and Payment Relations With Developing Countries

Up to now the questions of monetary and trade relations with the developing countries have not received sufficient attention in the CEMA countries' external economic strategy. There still are enormous untapped possibilities in the trade and clearing relations between the two groups of countries.

In monetary settlements between CEMA and the developing countries there has been since 1970 a pronounced trend toward the decline of clearing and the rise of payments in convertible currencies. Developing countries at present have no interest in joining the multilateral clearing system based on the transferable ruble. Regrettably, we still lack clarified theoretical concepts for expanding the transferable-ruble system to include developing countries, and hence we have no practical alternatives.

The expansion of economic cooperation with the developing countries is already of great importance today and will become increasingly important in the near future, for two reasons.



First, both groups of countries are interested in the expansion of their exports to the markets of the industrially developed countries. Moreover, the CEMA countries' export structure to capitalist markets is very similar to the developing countries' export structure. Consequently the CEMA countries must develop monetary and trade concepts that will permit increasingly close cooperation with the developing countries on the markets of the developed capitalist countries.

Secondly, the CEMA countries are interested in expanding their import of raw materials and fuels from the developing countries.

### 3.3 Mutual Relations Between the CEMA International Monetary System and the World Monetary System

The world monetary system is an interrelated system of international money markets and monetary institutions, but at the same time it is also the scene of international money movements in which all countries of the world --including the socialist countries--have a primary interest.

The international monetary organizations that were created at the end of World War II were unsuitable for the socialist countries to participate in them. Lately, however, these organizations are undergoing a gradual transformation. The essence of this transformation can be defined in that the dominant role of the United States is declining to a certain extent, the developing countries' role is rising, and the possibilities of borrowing are expanding.

Parallel with the outlined transformation, the following two trends are evident in the world monetary system: 1. The flow of capital between the developed capitalist countries--including also investments in the United States--is increasing and is becoming more and more symmetrical. 2. The Eurodollar market is used increasingly to finance the developing countries' trade expansion and other production facilities. 3. The socialist countries are turning increasingly to international money markets for financing their trade and investments. 4. On the international money market the developing countries are using their resources increasingly for external investments.

Certain aspects of the international monetary system affect the interests of all countries in the world, much more so today than ever before.

The economically less developed countries regard as expedient an international monetary system that would take into consideration, far more than the present one, the interrelations of international settlements, finances and trade development, and which would enhance increasingly the expansion of resources for development. This means first of all that such a system would have to ensure the financing of deficits and international aid, but at the same time it would have to contribute also toward greater liquidity. Particularly important for the aforementioned countries would be a system of stable exchange rates, one that would enhance the preservation of the value of their foreign-currency reserves and international proceeds, and the better planning of their expenditures.

In conjunction with the new phenomena noticeable within the world monetary system and the International Monetary Fund, the question arises as to what would be the conditions and possible forms of the CEMA countries' participation in international monetary organizations, or what other ways would be feasible for the establishment of a new international monetary organization for the purpose of financing the expanding East-West relations. Within the framework of the evolving new economic system it would be expedient to define the individual countries' interest in it, and on this basis also the community's interest.

Transformation of the world monetary system should take place under the socialist countries' direct influence and with their direct participation. Here the interests of the socialist countries coincide with the interests of the developing countries. Both groups of countries are interested in organizing a world monetary system that will not become the source of a worldwide inflation and monetary uncertainty. It is important that both groups of countries realistically assess their interests and the possibilities stemming from their joint concerted action.

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## ALBANIA

### CADRES IMPROPERLY TRAINED FOR SCIENTIFIC-TECHNICAL REVOLUTION

Tirana RRUGA E PARTISE in Albanian No 6, Jun 79 pp 56-65

[Article by Selfo Kuka: "We Support the Development and Expansion of the Scientific and Technical Revolution With Our Own Forces"]

[Text] The scientific and technical revolution in our country, developing on the basis of the policy and ideology of the party, as a component part of the socialist revolution, has progressed and has achieved great results: many scientific and technical problems have been solved and hydroelectric power plants, factories, equipment and complicated machinery have been designed and constructed. However, the fulfillment of the great tasks of the building of socialism and strengthening of the defense force of the fatherland, assigned by the party at its Seventh congress and at the plenums of the Central Committee after the congress, and the confrontation of the difficulties and overcoming of obstacles created by the fierce imperialist-revisionist encirclement and blockade have brought about a series of problems which are also connected with the scientific and technical revolution.

In all the general development of the country the party has followed and is following the principle of relying on our own forces and on domestic, financial and human resources and on the utilization of the inexhaustible physical and mental, creative and realizable capacities of our working masses. This principle has been followed and is being followed also in the development of the scientific and technical revolution. However, in the present stage of our development and in the conditions under which we are building and defending socialism, the consistent application of this principle has assumed a particular importance. Therefore, among other things, it is essential that the party line be understood and implemented better and better so that the development and expansion of the scientific and technical revolution will be carried out by consistently improving the great revolutionary principle of relying on one's own forces, because, the directions of the development of this revolution and the targets it intends to achieve must precisely serve the deeper implementation of the principle of relying on one's own forces at the level of all the economy.

The practice of the building of socialism in a small country, like our country, shows the superiority of socialism over capitalism, in every field, including the field of the development of science and technology, relying on its own forces, on the creative thought and capacities of the people, on the technical-material base of the country, on internal accumulation and on our experience and traditions and, on this basis, also profiting from the world progressive experience. The fact that within a short period our country passed from a primitive agriculture to a modern agriculture, from the plow to the tractor of Albanian manufacture, from the anvil and blacksmith to metallurgical combines, from the kerosene lamp and torch to the electrification of the country and to the planning and construction of giant hydroelectric power stations--demonstrate the correctness of the party line, the broad field that socialism opens to the development of science and technology, the work and talents of our workers and scientists and the fact that there is no field in which our people do not express their views.

Comrade Enver Hoxha has stressed that "Socialism is the work of the masses, therefore, everything that is created and produced is the fruit of the work, sweat and mind of the people" (Enver Hoxha, "Report to the Seventh Congress of the Albanian Workers Party (PPSH)," p 86). The development of our science and technology is also the fruit of the work, sweat and mind of the working masses.

This is a problem which is as much theoretical as practical. In the capitalist and bourgeois-revisionist system, the simple working masses are not interested at all in the development of science and technology, because, this development, having as its goal the increase of profits of the bourgeoisie, serves the increased exploitation of workers through intensified work, the dismissal of people from work and the increased number of accidents and of nervous tension and so forth. Therefore, there, the progress of science and technology is carried out and implemented in production by a group of technocratic people paid and led by the bourgeoisie. While, in our country, where the dictatorship of the proletariat is in power and where all the development depends on socialist ownership over the means of production, the working masses are directly interested in taking part actively, and in a conscientious manner, in the development of science and technology, because, the purpose of the scientific and technical revolution complies with the very purpose of socialist production that expresses the ideals of the working masses for an uninterrupted socio-economic development of the country, for strengthening the defense of the fatherland and for improving the well-being of all the people. It is a fact that the objective conditions created and the teachings of the party and Comrade Enver Hoxha have always been a great source of inspiration for encouraging the creative thought and active participation of the working masses in solving the many technical and scientific problems. The many initiatives and achievements of the working people speak about this. In the past five-year period alone, thousands of spare parts, machines and various pieces of equipment were produced; more than 75,000 valuable proposals, innovations and inventions were devised by the working masses, about 2,800 new units and lines were built by the forces of the working collectives themselves and so forth. The doubling of the yields of bread grains and of some

other agricultural crops within a relatively short period is the result of the mass participation of the agricultural workers in scientific experience.

These results, as well as the work carried out and being carried out by the party for improving the ideological and political and technical and vocational level of the workers of every sphere have now created convictions about the opportunities and capacities at the disposal of the working masses for the development and expansion of the scientific and technical revolution with one's own forces. However, the present state of our socio-economic development and the fulfillment and over-fulfillment of the tasks of this five-year period require that we further improve the ideological and political work for strengthening the correct concepts in regard to the role of the masses in the scientific and technical revolution and for creating a complete and firm conviction that the scientific and technical revolution, being connected with all aspects of production and of life, is also linked with everything that makes production progress, that is, with technology, mechanization, organization and management, on scientific bases of production and so forth. And all these, as life itself proves, cannot be solved without the broad participation of the working class, of cooperative members and of the people's intelligentsia, under the leadership of the party organizations.

"The participation of the broad working masses in the scientific and technical revolution," Comrade Enver Hoxha teaches us, "is a necessary condition for its further development and expansion and for the strengthening of its socialist character." Therefore, "it would be a mistake to think that the scientific and technical revolution will be carried out only by some learned people, skilled in theory and science, even if there are some thousands of them. No. Just as any real revolution, the scientific and technical revolution will be carried out by the broad working masses."

We emphasize this because in practice and in certain cases erroneous concepts and actions are still observed. As a result, it happens that some cadres and communists, by narrowing the sphere of action of the masses in the scientific and technical revolution and considering the latter as a work concerning only some engineers and the proper scientific institutions, and some innovating workers, do not undertake sufficient studies and experiments for solving the problems of production, while, even in the very limited study work which they do, they forget to involve the creative opinion of the masses.

The party, emphasizing the broad participation of the masses in the scientific and technical revolution, has never denied the role played by scientific workers and the proper scientific institutions. The implementation of the magnificent program of the party for the building of socialism with our own forces requires the mobilization of the creative energies and the revolutionary courage of all workers with regard to the settlement of the many complicated problems. Within this framework, the scientific workers and scientific institutions must play a great and comprehensive role.

The specialized scientific research institutions and stations in the various fields are also entrusted with great tasks for the expansion of the scientific



and technical revolution. Since some of the best trained cadres and specialists are gathered together in these institutions and stations and since they have all the opportunities, they are required to execute a greater amount of study and research work. Here the issue is not only that these institutions, by linking themselves more closely with the base, must lead in scientific studies and research works, but also that they must improve the qualitative level of the studies, in order to improve work qualitatively and to train cadres and specialists.

As practice shows, massive experimentation is a powerful means for increasing the creative thought and action of the masses in the field of science and production. Therefore, the institutions and centers specializing in research work must better link their activity with massive scientific experimentation; they must generalize progressive experience and disseminate scientific knowledges among the masses. This also is one of the chief ways to protect the workers in science from bureaucratic technocracy and intellectualism.

Today, in the scientific research institutions and stations, as well as in the technological bureaus, which have been established in enterprises, there are a great number of workers. However, if the scientific work is left only to these people, the results would be very insufficient, compared to the existing opportunities and to what it is required. On the contrary, if these scientific institutions, research stations and technological bureaus see and act as nucleuses which, along with the scientific work they themselves do with their workers, coordinate the work with the departments and various enterprises and organize and manage the scientific work that develops at the base, according to the profiles that they cover, then, the potential of the scientific forces will multiply and it will be in a position to meet much greater tasks. But, on certain occasions, this mass dissemination of scientific work is understood in a narrow manner and is limited to the activation of a handful of outside collaborators, included in some lists which certain institutions keep. This is also a reason preventing the complete implementation of the party guideline that scientific institutions should assist every technological bureau, every experimental station and every collective of specialists of the various profiles to be converted into true scientific centers which would use and encourage the creative idea of the working masses, making an organic connection between production activity and scientific research work.

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Man, Comrade Enver Hoxha teaches us, is also the decisive factor for the development of the scientific and technical revolution. However, in order that he may participate vigorously and with great effectiveness in this revolution, it is necessary that he be prepared not only from the ideological aspect, but also from the technical and vocational aspect. For this purpose, diverse forms have been used and are being used, such as schools apart from and connected with work, various training courses, lower vocational schools and so forth. However, on certain occasions, there are manifestations of underestimation of the value of these schools and courses, as well as manifestations of formalism, onesidedness and empiricism in their functioning



and in the development of their teaching process, not always seeing the study of theory in unity with practice, without underestimating either theory or practice.

The party attaches a particular importance to the scientific training of cadres. And here it is a question of the training of all workers and cadres who participate in the scientific and technical revolution. With regard to the proper implementation of this requirement, it is necessary, first of all, to defeat all narrow and erroneous concepts and bureaucratic practices which still are observed on certain occasions. Let us consider, for example, the issue of post-university training. Despite improvements achieved, this training still needs to be perfected, to get rid of some old bureaucratic, narrow and intellectualistic concepts and to increase requirements in conformity with the stage of present and future development. In practice, one can observe a pursuit of scientific titles, regardless of the fact that the works of those who obtain these titles, on some occasions, are kept in drawers. The party assigns the task that the scientific works for the training of scientific workers, for the defense of dissertations and for scientific degrees directly serve production; Otherwise, we will have to deal with a scholastic, formal training, with an increase of useless requirements, which consume the energies of the people in vain.

Continuously struggling against any feeling of inferiority and of submission to what is foreign and against any manifestation of stereotyping and of borrowing, our party has never, on any occasion, denied the benefit of progressive world opinion, the achievements of science and technology in other countries and the profit from them, on the contrary, it has created concrete conditions so that our workers of science and technology may follow close hand the scientific achievements in the different countries of the world, profit from them and implement them in a creative manner, in conformity with the concrete conditions of our country. The party, by strengthening confidence in our own forces and developing revolutionary pride and national dignity, has never thought and never thinks that we should be estranged from the development of science and technology in the other countries. The application of the principle of relying on our own forces presupposes the study and assimilation of the best achievements of world science and technology. These achievements, however, must be taken and implemented with a critical eye, taking into consideration the conditions of our country, the satisfaction of our real needs and requirements and, in a particular manner, the conditions created by our socialist social and economic system, as well as the requirements of its uninterrupted development. Therefore, "it is essential," Comrade Enver Hoxha emphasizes, "that, in the understanding and implementation of the scientific and technical revolution, the great Marxist-Leninist principle of relying on one's own forces, be always taken into consideration. This principle, which is an imperative necessity, also in this field, demands that we find, by ourselves, the solution of the great and complicated problems by applying in a creative manner the general scientific and technical laws in accordance with our social, geographic and climate characteristics, in accordance with the larger part of the territory which is steep and mountainous and in accordance with the polymineral resources that

have their own laws of expansion--which often differ from those of the other countries." According to this understanding, for example, if we take a new technology or a model of combine from another country and examine it with regard to its size, capacity and ways of organizing work and production, we should always take into consideration our concrete conditions, with a small territory and small population, as well as our social and economic system. We cannot wait for ready-made solutions from the capitalist, bourgeois and revisionist countries, especially, in the field of the socialist organization of work and production.

The execution of such a policy has made it possible in our country, for science, in general, and the scientific and technical revolution to develop in the national land, in accordance with the needs and conditions of the country, by solving the various problems in conformity with these characteristics and conditions. This is the result of the correct Marxist-Leninist policy which our party has pursued and pursues and of the great progress, at unprecedented rates, achieved in our country in the further development of production, science and so forth. Today our workers are capable of and have taken upon themselves the planning and building of many works, plants and complete factories, as well as of complicated equipment and machinery. In 1978 alone, a number of new works--the fruit of the scientific mind and of the skilled work of our specialists and cadres--were inaugurated. Thus, for example, the "Light of the Party" hydroelectric power station was studied, designed and built by our cadres and workers. This is a giant project not only with regard to its size and production capacity, but also with regard to the scientific and technical capacity involved in its design and constructing, and with regard to the great volume of constructions. The dam of this hydroelectric power station is among the highest in the world, while the complex of hydroelectric projects, such as the receiving units, discharging tunnels and so forth are among the most complicated projects.

The socioeconomic and cultural development of our country has created concrete conditions for the expansion of the scientific and technical revolution in all fields with our own forces. Today we have a working class, whose members are many in number and ideologically and politically, educationally and technically and vocationally skilled we have a cooperative peasantry with great experience in agricultural problems; we have more than 40,000 cadres with higher education and about 120,000 cadres with middle education, constituting an entire army of educated people; and we have a powerful technical-material base, 32 scientific research institutes, some higher education institutes and a great number of technological bureaus in which about 4,500 people work.

All these conditions, Comrade Enver Hoxha teaches us, assign to the party organizations, the state and economic organs and to all the working masses the task of utilizing, as correctly as possible, the technical and material base created and the resources of raw material and of work forces. The issue is, among other things, to apply a strict system of savings in all sectors and in all directions, in a continuous manner and not by campaigns, to increase exports and reduce imports, to use manpower correctly, to utilize production

rationally and so forth. We emphasize this, because, there still are frequent cases of the failure to use some metal-cutting machines on three shifts, the lack of complete utilization of steel, timber and coal and the lack of sufficient concern for the preservation and maintenance of machinery and so forth, which reduce the effectiveness of their use, keep them from achieving the planned accumulation and consume additional resources in currency. Within this framework, particular importance must be given to the use with high effectiveness of the technical-material base, which the party and state have created for the needs of science; science has been given the most modern equipment; however, there are also cases of a bad utilization of science and without needed effectiveness, as has happened in the health sector, in the petroleum industry and in other sectors.

It is known that the development of the scientific and technical revolution in our country, based on our own forces, transforming the means of production, strengthening the technical and material base and increasing labor productivity and, in general, increasing effectiveness of social production, renders our economy more independent and more dynamic and creates better conditions for implementing with greater success the principle of relying on one's own forces in the solving of all the problems of our uninterrupted socialist development. It is precisely for this reason that, all the time and especially in this stage of the development which we have reached and, in the conditions and situations under which we are building and defending socialism today, that the party devotes a particular concern to the problems of the further expansion of this revolution. Seeing the issue from this vantage point, the aims, as well as the objectives that are required to be achieved by us through the expansion of our scientific and technical revolution--also come into light.

First of all, the scientific and technical revolution in our country, being a component part of our socialist revolution, relying on its achievements and having the task of supporting the socialist revolution through the various aspects of its development, as Comrade Enver Hoxha emphasized, does not aim at any kind of development of material elements of production forces, of science and of technology; on the contrary, it aims at such a development that conforms with the ideology and policy of the party, with the basic interests of the working class and of other working masses--of today and of the future--with the development and perfection, on the revolutionary road, of socialist relations in production, and with the requirements of the economic laws of socialism. In this sense, with regard to the determining of the tasks which the scientific and technical revolution must solve, we started and we are starting not simply with the economic advantage, with the profit and the interests of the moment, as is done in the capitalist, bourgeois and revisionist countries, but, with their influence on the development of the country on the road to socialism and the development of those branches that constitute the basis of the economic vitalization, of the defense capacity of the country and of the gradual and positive improvement of the well-being of the working masses. Examples of this are the electrification of the country, socialist industrialization, the priority given to the development of heavy industry and the development of those agricultural branches that provide the necessary

needs for the people and the economy and not simply those branches which are more profitable. Within this framework, a particular importance is also given to the fact that, through the expansion of the scientific and technical revolution, a correct solution should be given not only to the technical aspects, but also to the economic, political and social aspects, by organically linking the problems of the general development of the country together with them.

Seeing the problem of the development and expansion of the scientific and technical revolution not simply from the technical vantage point, but, first of all, from the political and ideological vantage point, and taking into consideration also the concrete conditions under which our country is building socialism--encircled by numerous imperialist-revisionist enemies and under their fierce pressures and blockades--the party has directed the development of this revolution toward those fields that provide a most suitable structure of the technical material base, capable of responding to the development of a multi-branch economy for developing those branches that make the economy, independent and dynamic, capable of satisfying the basic needs of workers and of the economy in any circumstance. Marching on this road, in our country, a powerful technical-material base has been created in all branches of the economy--a fact that has created great and comprehensive opportunities so that our social and economic development will progress uninterruptedly, powerfully relying on our own forces. Presently, our economy is in a position of providing more than 85 percent of the needs for consumer goods and more than 90 percent of the needs for spare parts and so forth. In the Sixth Five-Year Plan the aim is to increase these indicators 90 and 95 percent respectively. As the 6th Plenum of the Party Central Committee pointed out, in these 3 years of the 6th five-year plan, despite the hostile attitude and the breaking off of economic relations by the Chinese revisionists in a treacherous manner, our economy did not stop its dynamic development; on the contrary, the socialist production increased with more rapid rates than the increase of the population. Our great successes are: the production of steel and cast iron, the first tractor of Albanian trademark, the drilling probes, the providing for the third consecutive year of the needs for bread grains from our own soil and so forth.

It is only by seeing the entire social and economic development of our country in toto that the greatness of the economic policy pursued and being pursued by the party for the building of socialism with our forces comes to the fore. The building of a multibranch economy, relying on the domestic resources and natural wealth of the country, has made it possible that, even in the conditions of the imperialist and revisionist encirclement and of the economic crises in the capitalist and revisionist world, as well as in the conditions of the great obstacles created by the Chinese revisionists, today we are marching forward and developing the economy at a rapid pace, without stretching our hand to anybody and without requesting credits and aid from the capitalist, bourgeois and revisionist countries.

However, in order that our economy will always be strong and firm, Comrade Enver Hoxha teaches us, it is necessary to continuously increase our efforts to fulfill and overfulfill by all means the tasks of the plan in all qualitative and quantitative indicators, producing according to the motto: "As



much as possible, quicker, better and cheaper." Therefore, the targets and tasks of the scientific and technical revolution in every branch and sector of the economy and culture stem from the struggle and the intention to fully implement the party's directives and guidance for the fulfillment of the plan for the social and economic development of the country.

In the field of the expansion of the scientific and technical revolution a particular importance is given to such problems as electrification, mechanization, automation and further use of chemistry in production and the application of new technological processes, as well as to the problems concerning the social organization of work and production. It is important that these problems be scientifically conceived and that the entire work of the party organs and organizations and of the state and economic organs be scientifically programmed in this direction, in order to study and solve the main technical and scientific problems of production not only for today, but also for the future. It is important, among other things, to struggle with severity against any tendency toward assigning and solving easy tasks by holding reserves and to solving certain problems in a spontaneous manner, without seeing the present problems in complex and in close relationship with those of the future. Some enterprises set tasks for the study, experimentation, design and construction of some machines, only for their own needs, without thinking of a much broader organization of production, so as to satisfy all the needs at the level of the district, branch and of the economy--an action which leads to studies and experiments on the production of some spare parts, equipment and machinery made at the same time as in some other enterprises or districts, thus, reducing the activity of social work.

Now the schedules and plans for the further extension of the scientific and technical revolution, determining concrete tasks, have been drafted everywhere, for every branch of the economy; the organizational and technical measures have also been taken and work is being carried out for fulfilling the tasks. However, it is necessary that the state and economic organs, as well as the scientific institutions, manage all the work which is being carried out and which must be carried out in this field, from much closer and in a more concrete manner, and mobilize the skilled cadres and specialists, free them from routine jobs which, often do not concern them in the enterprises, ask them to deal with scientific study and research work and direct and aid them to overcome difficulties and obstacles. It is a positive fact that some hundreds and thousands of specialists are involved in research projects for the study and solution of some important problems. Therefore, some organisms for the management of scientific research work have been set up in the central departments and the executive committees of the district people's councils. But, it is observed that organisms have also their shortcomings. They are not properly playing their role; they are not rapidly and completely solving soem acute problems, especially, some problems concerning work co-ordination, and planned centralization, specialization and cooperation.

Such skilled management on scientific bases, a dynamic and effective management of work, for solving the concrete tasks of the further expansion of the

scientific and technical revolution is necessary for achievement of that new qualitative leap which can be made and which has been scheduled to be made to the domestic production, in a massive manner, of the drilling probes, equipment and machinery for complete units and factories, for hydroelectric power stations, and for plants for the production of various consumer articles. Owing to the large supply of metal-cutting machines at the disposal of our machine industry--machines classified as having the same level as the metal-cutting machines of the industrialized countries, because of their technical and economic coefficients and loading indicator--all the technical opportunities exist for solving such tasks on the spot. And, there is no lack of skilled designers and specialists to design and execute them. But, there are tasks which cannot be solved by partial measures and by measures taken at the level of the enterprise and the district. It is precisely this that dictates the need for a better centralized organization and management of work at the branch level and up to the level of all the economy. This is a necessary requirement for applying the principle of relying on our own forces and for solving the most difficult and most complicated problems.

Certainly, this does not mean that one should wait until everything is solved from above in a centralized manner. Many problems of the further mechanization of production and building in industry, mines, construction and agriculture, as well as many problems of the improvement of technology in production, and so forth, can and must be solved by the forces of the enterprises themselves and at the level of the district. The manifestations of waiting in expectation, observed in some cases and stemming from the foreign concept, that is, to avoid headaches, clashes with the principle of self-reliance and, as such, must be combatted, because, to wait for others to do what you can do yourself means, in the development of the scientific and technical revolution, not to take into consideration the requirements of the principle of relying on one's own forces and not to properly utilize all the opportunities that have been created.

As shown by practice, the solution of the problem of the further expansion of the scientific and technical revolution by relying on one's own forces, is placed on healthy bases and on the right path. However, the party set the task of marching with quicker steps and with greater assurance on this path, always inspired by its Marxist-Leninist line and by the revolutionary impetus of the working masses.

The struggle and efforts of our working masses, headed by the party, for achieving the various targets in the field of the scientific and technical revolution, relying on their own forces, will make it possible for our economy to be every day more independent and to develop in an uninterrupted manner at a rapid and steady pace. Therefore, it is important to thoroughly understand the task assigned by the party, that is, to keep concrete links in the field of work organization for the extending of the scientific and technical revolution. The successful fulfillment of the tasks requires the mobilization of all the working masses and reliance on their creative thought and initiatives and on the participation of all cadres, the intelligentsia, workers and cooperative members.



## MORE SPECIALIZATION NEEDED IN MACHINE INDUSTRY

Tirana RRUGA E PARTISE in Albanian No 6, Jun 79 pp 45-55

[Article by Llazar Xhajanka: "Greater Attention to the Problems of Centralization and Specialization in the Machine Industry"; passages between slantlines printed in boldface]

[Text] Our machine industry, under the continuous concern of the party and Comrade Enver Hoxha, has developed at rapid rates. Today, machine industry is equipped with a powerful technical-material base and plays a great role in the development of the people's economy. It has become a powerful support to the further expansion of the technical and scientific revolution in all branches and sectors of the economy.

In implementing the tasks of the 7th Congress of the Albanian Workers Party the workers of the machine industry, along with the work for keeping in good condition the technology at the disposal of the economy, are broadly engaged in building plants and factories with our own forces and in the production of machinery and equipment, as well as in completing the projects which were left unfinished by the Chinese revisionists.

Through the expansion of the technical and scientific revolution, successes have been achieved in the machine industry in the direction of setting up an advanced technology, especially, in the plants and workshops with centralized production. The work groups, technological bureaus, specialists and vanguard workers have studied and better established the technology of production and are struggling for implementing technical discipline in work processes. This has made it possible to produce complicated parts, such as cylindrical blocks, helicoidal torques and bearings; complicated machinery, such as tractors and the first motor-vehicles of Albanian manufacture, various types of agricultural machinery, probes, metal vessels; and machinery and equipment for the construction of complete projects, such as sugar factories, plants for the enrichment of mineral ores and many other things.

These results have not been achieved easily. On the contrary, they were achieved with efforts and persistent work, first of all, in the struggle against restraining concepts, artisan tendencies, and inclinations "not to

produce parts in small series, under the pretext that they require great preparation and that the labor productivity on their production is low," against the idea that for "some complicated parts it is not worth while to become involved in studies and in experiments," and against the tendency "to produce spare parts only for the needs of the enterprise and not for all branches of the economy" and so forth.

The comprehensive work for the deep political and ideological understanding of the tasks assigned by the party to the workers of the machine industry, continuous consultations with vanguard workers and the persistent work not to retreat in the face of difficulties have made it possible to deal strong blows to erroneous concepts and tendencies and to liberal attitudes and to achieve a chain of successes which have led to the increase of production and labor productivity, to the improvement of the quality and to the increasingly better exploitation of production capacities.

However, it would not have been possible to achieve these results, without improving the organization and management of work and of production, without expanding centralization and specialization of production and without further developing cooperation. Thus, only on the basis of the cooperation of some plants was it possible to create some lines and units which are based on the production of parts according to technological similarity, such as the lines for bearings, pistons, jackets, elastic rings, precise castings and so forth.

Nevertheless, it is a fact that shortcomings and gaps still exist, especially, with regard to the production of some complicated parts needed in small quantity, the preparation of blueprints and the drawing up of technical documentation. Cooperation between machine enterprises for the production of parts, joints and other things on certain occasions was not planned at the proper level; therefore, there still are manifestations of a spontaneous work in this field. It is a fact that during the first 3 years of the current five-year period, the production of spare parts and of machinery increased by more than 40 percent; but, the requirements and opportunities are greater and, the lack of proper utilization of these opportunities is due, first of all, to the absence of a suitable technology, to the lack of technological documentation at the proper level and the great expenditures needed for the necessary technical preparation. Thus, for example, the parts for the heavy machinery in the "Light of the Party" hydroelectric power station and of non-massive motor vehicles, which are quite complicated and few in number, have been produced individually, with unsatisfactory output [in the majority of the cases they have been produced in the instrument units.]

All this stresses the need for the further perfection of the scientific organization of production and the establishment of a more advanced technology, which today constitute the greater reserve for increasing production, raising labor productivity and improving the quality in the machine industry. Along with these measures, it is necessary to work more intensively and in a more organized manner for the training and specialization of workers.

Today, when the hostile activity of the Chinese social-imperialists is added to the imperialist and revisionist blockade and, when our people are building socialism completely relying on their own forces, a number of problems have emerged which, as Comrade Enver Hoxha teaches us, "require a deeper understanding of the content of the technical and scientific revolution, the assignment of more precise tasks and objectives which the development of this revolution must achieve in the various branches and sectors of the economy and the greater mobilization of the creative forces and energies of our workers for a better utilization of the powerful technical-material base which exists and for its further progress."

Based on these teachings of Comrade Enver Hoxha, tasks have been assigned so that in these final 2 years of the Sixth Five-Year Plan period 60 percent more spare parts, compared to all the new parts produced during the last 3 years, 1976-1978, taken together, will be designed, tested and produced. Also, during this period, hundreds of new complicated machines and equipment will be produced for the projects which the Chinese revisionists have left unfinished.

The work program for the expansion of the technical and scientific revolution assigns to the workers of the machine industry important tasks with regard to the study, design and production of a number of machines and equipment for all sectors of the economy. The series production of motor vehicles, tractors and other machinery of importance for the economy, with advanced technology and with high labor productivity, also set forth a range of important problems for the machine industry.

The fulfillment of these tasks requires a qualitative change in the orientation of the entire work of the machine industry which, along with the production of spare parts, with an advanced organization and technology, will also greatly increase the production of machinery for complete works. The taking of this qualitative step is a necessity required by the present stage of the development of the economy and the consistent application of the principle of relying on one's own forces. But, at the same time, all the necessary conditions for fulfilling this task have been created. The technical-material base has been extended and invigorated and the workers and specialists who manage it are tempered and are being tempered more and more with the party ideals, and have gained a good experience. And, in order to utilize these opportunities in the best way possible, the party recommends, among other things, that concrete measures be taken with regard to the extension and centralization of production according to the technological and constructional similarity of parts, with regard to the perfection of technology in the existing plants and workshops and in the new plants which will be built with our own forces, and with regard to the unification and standardization of spare parts and joints of machinery.

/1. The present stage of development of the machine industry requires the centralization of production according to the technological similarity of parts./

Today the enterprises of our machine industry, with the exception of some large plants, are asked to produce a very wide range of spare parts and machinery of various kinds in small quantities. If we carefully observe the nomenclatures of production of plants, workshops and machine bases, it appears that there is much duplication in nomenclatures and technological processes. Not infrequently the machine bases with limited technical possibilities are assigned the task of producing parts with increased technical requirements, such as cogwheels for motor vehicles, mortise axles and so forth. Under these conditions, regardless of the efforts carried out for improving the production technology of these parts, again, on many occasions, the production remains on artisan bases, with low output.

The correct solution of this problem requires that, along with the important work for the drafting of the technical documentation and for its implementation, concrete measures must be taken for the further centralization and specialization of the machine industry mainly according to the criterion of technological similarity. Such a measure would make it possible for parts for different purposes to be grouped together and worked according to a common technological process, using the same equipment and machinery. Such an organization would eliminate duplications and would increase the range of production, thus making it possible to apply a more advanced technology. Also, the grouping and concentration of parts according to technological similarity so as to produce them in one plant or workshop create possibilities for the specialization of enterprises in specified products. Referring to these problems, Comrade Enver Hoxha emphasizes that "centralization brings in itself a more perfected utilization and organization; it creates great opportunities for specialization in the production of spare parts for all the mechanisms in our country" and concludes saying that "there is no specialization without centralization" (Enver Hoxha, Reports and speeches 1967-1968, pp 248-249).

The present work experience in the implementation of the recommendations of the party shows that centralization and specialization of production have great advantages in comparison with small production. Thus, the centralization of production of pistons, jackets, bearings, elastic rings and other things for massive motor vehicles and tractors at the "Enver Hoxha" auto-tractor combine and centralized production of pistons for non-massive auto-tractors at the agricultural machine plant in Korce and so forth have made it possible to reduce production expenses by 2-4 times and to improve the quality considerably.

The specialization of production on the basis of technological similarity responds both to the requirements of production of special and unique machines and equipment which can be produced by the machine bases and to the production of machines in series--a fact of particular importance, especially, at the present stage of transition to the broad and organized production of machines in the country. But, so far, this way of organization of production has been



applied only to the production of some parts for auto-tractors, connecting parts, and parts for instruments and so forth.

The production in the country of some machinery and equipment for some important projects was achieved by means of cooperation among the various machine enterprises. Thus, for example, for the production of machines of the new sugar plant in Maliq 17 workshops from various departments worked and cooperated with other plants in the production of special parts. However, since the planning for the production of parts was carried out mainly on the basis of opportunities and not on the basis of an extended specialization, some plants encountered great difficulties, had heavy workloads and were forced to postpone the deadlines for some other products in order to fulfill the tasks of cooperation. These difficulties were overcome by the great efforts of the workers of these enterprises, following some consultations with cadres and specialists on the exchange of experience and on the correct coordination of efforts.

But, these difficulties will become even greater when the machine industry moves on to the large scale production of machines with advanced technology and high quality, because, in this case, cooperation must be extended to a large nomenclature of parts and articles--something which cannot be solved by producing them through individual processes and by utilizing only some free production capacities.

The production of machines in series requires that some parts and articles be provided through cooperation with specialized plants or workshops which produce with specified nomenclatures. Thus, for example, the agricultural machine plant in Durres, to produce self-propelled combines, will have to take many parts ready made, such as cog wheels, axles, and so forth produced by other enterprises on the basis of technological similarity. And, the same thing will be required for the production of other machinery and equipment which are needed by the economy.

Centralization and specialization are important factors for the expansion of the technical and scientific revolution in the machine industry, not only because they create real conditions for a noticeable improvement of the quality and increase of the quantity of products, but also because they create favorable conditions for a wider utilization of Albanian steel and cast iron, at the same time, improving the other technical and economic indicators, such as output, cost and so forth. On the other hand, in this way, the machine industry is organized on scientific bases and becomes more capable of responding completely to the needs of the economy.

With regard to the application of party's recommendation for the further centralization of production and for the extension of specialization, some important studies have been made, such as those on the concentration of colored metal castings, concentration of the production of some parts for auto-tractors, of all bumpers for motor-vehicles, of bolts and so forth. The drawing up of the general "classifier" of parts by the Institute for Machine Studies and Designs is an important step for carrying out a complete study on the

expansion of specialization in the machine industry. A large amount of information on the kinds and types of parts, as well as on many parameters and other important construction and technological data, is provided through the assistance of the accounting center. These data will serve not only to carry out a study at the national level on the better utilization of the existing supply of metal-working machines, to discover the free capacities and to improve the indicators of the utilization of raw material, as well as of all other technical and economic indicators of production, but also to determine the road that we should follow for the production of parts with specialized lines and to avoid the duplication which we have today in the production of some identical or similar parts.

However, the attention is drawn to the fact that, with the exception of the "Enver Hoxha" auto-tractor combine and another plant, centralization and specialization of production, according to technological similarity, is not progressing at the required rate. This happens because there still are restraining concepts, artisan concepts and practices and a departmental spirit in the handling of the problems. Some departmental specialists and cadres are not convinced of the need for the concentration of colored metal castings, which today are carried out by many machine workshops and bases, and for the concentration of the production of some parts, such as cog wheels and metal consumer goods, which today are produced by several plants and workshops in a duplication of effort. These attitudes also occur because some specialists of the machine industry are afraid of the scientific organization and planning required by concentration according to technological similarity.

With regard to the correct application of the party guidelines in the field, it is required, first of all, to create ideological and political convictions about the necessity of the perfection of the scientific organization of production and to take concrete measures, on the basis of scientific studies, by guiding this process in an organized and centralized manner and by combatting any manifestation of spontaneity, of voluntarism and of subjectivism. It is understood that centralization of production will be carried out step by step, starting with the most important articles, with the unified and standardized articles, such as connecting parts, parts for technological equipment and so forth. However, it is important that the party recommendation with regard to the extension of studies be understood and correctly implemented both by the workers of the scientific institutions and of the state and economic organs and by these workers at the grassroots, correctly combining the initiatives from below with centralized management.

/2. The continuous perfection of production technology in the existing machine plants and workshops, as well as in the new plants to be built in the future, constitutes an important factor for improving work effectiveness in this branch of the economy./

It is true that work has been done and is continuously being done for the perfection of technology, and results are good; however, reserves and opportunities for further perfection are great not only in plants, but also in

machine workshops and bases. In this sense, the perfection of technology is one of the main and continuous objectives of the technical and scientific revolution in the machine industry.

In the present conditions, when the task is set for supplying more than 95 percent of the needs for spare parts through domestic production and for increasing the production of machines, it is necessary to introduce work technology as widely as possible in the groups of parts by drafting standard technological processes that require a minimal number of technological apparatuses for a group of parts.

To prove the superiority of this technology, compared to the individual technology, which is used today by many machine workshops, it is enough to stress that the study made at the "Enver Hoxha" auto-tractor combine reveals that for 250 kinds of cog wheels only 25 standard technological processes were drawn up, therefore, 10 times fewer than under the old technology, and for 50 kinds of valves only 1 technological process will be drafted, therefore 50 percent less, and so forth. Expenses for technical preparations required for the production of parts are also reduced in a similar proportion; and their costs and the designing time will be much economized.

The expansion of the preparation of semi-fabricated materials, cast or fabricated with the most advanced technology, has a special importance in the machine industry. In certain machine units today more chip is taken than necessary, because the processes of forging, pressing and drawing steel and colored metal are not often used because the parts are cast with thicker partitions than indicated in the drawing. These shortcomings and the failure to use advanced technological processes in the necessary quantity have directly influenced the excessive consumption of raw materials and the reduction of the coefficient for the use of metal. The lack of proper preparation for the semi-fabricates has caused, at the same time, the overloading of metal-cutting machines in an unnecessary manner, thus, increasing production costs.

Of course, there is a positive experience also in this field, but it must be generalized and disseminated much better than it has been until now. Thus, some large plants with progressive technology are doing a good work with regard to the preparation of the semi-fabricates. It is worth mentioning the construction of the unit for the hot and cold drawing of rolled steel and of galvanized iron at the instruments plant in Korce--a fact that has made it possible to considerably reduce the consumption of instrument steel, which is brought from abroad at a very high cost.

Practice shows that reserves and opportunities for the preparation of semi-fabricates with minimal expenses are large and that the conditions and producing capacities for fulfilling these requirements exist. However, they require the extension of the technology of forging with free pressing and beating, and the introduction of pressing with rotation, with flattening out and drawing of steel--processes which not only save raw material, but also noticeably improve the quality of products. While, in the foundries it is necessary to increase castings, with pressure, with centrifuges and so forth.

The introduction on a large scale of these technological processes, which we mentioned, both in the foundry, and in the forging and casting units, besides other things, also requires the centralization of production, without which some progressive technological processes cannot be applied. "Changes in technique and technology," Comrade Enver Hoxha instructs us, "require the change and perfection of the forms of the organization of work and production."

The increase in the production of the machine industry both in this five-year period and in the future will be carried out mainly by the more intensive and extensive utilization of the existing supply of machinery, the building of new machine plants and units and their continuous reconstruction. However, as is known, especially, the building of new plants or units demands relatively large investments. However, it is understood, that they will be used for a long time and that the level of their technical progress will certainly influence the level of the technical progress of other branches of the economy. Therefore, it is necessary that, with regard to the improvement of effectiveness of investments in this field, seeing the problem especially with an eye to the future, the study and planning of the new machine plants and units, as well as of reconstructions, be carried out at a high scientific level, with progressive technology, applying the criterion of technological similarity in the production and assembling of parts.

Starting with the experience and concrete conditions of our country, it is necessary that the study and designing of every new project be made in such manner that it may fulfill the needs of all branches of the economy and present prospects for extension; the new plant or line must not have a closed cycle; it must be designed in such a way that it can have the possibility of cooperating with many other plants and units for (the production of) cast and forged semi-fabricates, instruments and so forth. An enterprise, designed in accordance with this criterion, will not only be less expensive, but will also produce with advanced technology and at low cost.

Although the superiorities of centralization of production of parts according to the standard of similarity have been emphasized in the various consultations and seminars, there still are cases proving the continuation of the practice of designing with closed cycle or partially closed cycle, meaning the providing of all auxiliary operations within the enterprise. This road pursued upto now is the reason that the auxiliary units of forging, thermic workings and of instruments and so forth in many plants and workshops are much less utilized than the main units. The attention is also drawn to the fact that the study and designing of some plants and units, which will be constructed in the coming five-year period, have been executed according to specialization, at the base of the project, with closed cycle, where all auxiliary units are built near the plant. If these projects are built in this way, they will be more costly with less utilization of machines and with high overhead. This phenomenon is also observed in the studies being made on the reconstruction of the "Dinamo" plant, the reconstruction of the bearings plant and so forth.

The planning and construction of projects for the production of parts, according to technological similarity, demands, above all, that greater attention



be devoted to learning the future needs of the economy. For this, it is necessary that the other branches of the economy also carry out more extensive studies in order to know the needs they will have for parts, machinery and equipment, relying upon consumption norms and upon the use of machinery and equipment with the highest technological level possible, so that they will respond to the conditions prevailing in our country.

Technological specialization has great economic effectiveness; it consists of the centralization of production according to the similarity of technological processes in the special phases of the perfectioning of parts. In this direction a great economic advantage is provided by the planning and building of plants and units for casting, forging and thermic processing, for the production of welded constructions and so forth, which will fulfill the needs of the various branches of the economy in accordance with a scientific planning. Such specialization will make possible the maximum exploitation of the existing machines and equipment and the better utilization of free capacities and, as a result, will greatly reduce the importing of these machinery and equipment which is very expensive. The present practice of the construction of these specialized units, attached to all machine plants, shows that neither these units nor the special machinery--as they are not centralized--are exploited at the proper level. Thus, for example, the unit of the thermic processing of the plant for instruments in Korce, although it has a heavy workload in comparison with the other plants, is used at not more than 70-80 percent of its capacity. The same thing happens with the forging units of the "Enver Hoxha" auto-tractor combine, the agricultural machine plants in Durrës and so forth.

Centralization of production, according to technology will be achieved not only by means of the studies of the new projects to be built, but also by the study and planning of the reconstruction of existing plants.

/3. Unification and standardization of spare parts and joints of machineries is an important factor for the centralization of production./

To centralize production according to technological similarity in the machine industry, work must be started in the direction of unification and standardization of spare parts, instruments, joints and machines be continued intensively.

Our economy needs all kinds of machinery and equipment; however, with regard to the conditions of our country, this machinery and equipment is needed in a small quantity. Therefore, this specific development of our country must be properly taken into consideration in the organization of work and of production for every machine plant of the country and, in general, at the level of all the economy. "The needs for certain products," Comrade Enver Hoxha emphasized, "are quickly fulfilled; therefore, in our country the series must be small or medium-sized and easily handled, otherwise, as a result of this weakness and shortcoming stockpiles of goods and products are created and great human and material values are lost."

It is known that about 70-75 percent of the parts and joints of machines are cog wheels, axles, levers, bolts and parts which are similar or identical. If these joints and parts are unified and standardized and if their production is organized in series, very favorable conditions are created for designing and for quickly producing machinery with high quality at low cost. "With regard to the overcoming of the artisan aspect," Comrade Enver Hoxha recommends "it is also necessary that standardization and unification in series of many products and spare parts in the machine industry be further advanced."

To carry out this recommendation of the party, extensive work has been done on the drawing up of standards and the unification of parts. The workers of the "Enver Hoxha" auto-tractor combine have gained a good experience; in co-operation with the agricultural workers, they carried out the unification of the 75 HP engine; the workers of the "Petro Papi" plant instruments in Korce also gained a good experience in the standardization of instruments, and those of the machine plant at Stalin City gained a good experience in the unification of the parts for drilling probes and so forth. By using these standards, it has become possible to reduce the volume of the planned work for the machinery of the mineral enrichment plants and of sugar plants by 45 percent and to considerably reduce the nomenclature of spare parts for the tractors that are produced by the plant.

With regard to the planning of machinery for the sugar factory and the mineral enrichment factories, besides the use of these standards, the typing and unifying of some machinery, equipment, joints and parts were also carried out, a fact which further reduced the volume of the planned work.

However, the work achieved until now is only a good beginning which should be further advanced, because, there is a great deal to be done in this field. Thus, little work has been done for the unification of electric parts, of the parts for textile industry machinery and machinery used in agriculture and so forth. The fulfillment of the program of research and scientific work is of a particular importance for the unification of internal combustion engines using diesel oil and gasoline, for the unification of some kinds of motor vehicles and tractors and for the unification of construction parts of machinery that are needed by the economy, aiming at unifying 60-70 percent of the design and production work. The work for the unification of technological processes and equipment can be extended side by side with this.

The good work organization for unification and standardization of parts and joints in all machine plants and workshops and the work coordination between plants and the Institute for Machine Studies and Designs are making it possible for the required results to be achieved also in this field.

A very important problem for the economy is the unification of steel, utilized by the machine industry, the construction sector and other branches of the economy. The reduction of the trademark dimensions of steel and the channeling of the needs of the economy, in conformity with the products of the "Steel of the Party" metallurgical combine, are greatly influencing the reduction

of imports and improving the effectiveness of the products of this combine. For this purpose, important studies have been carried out by a work group under the direction of the Institute for Machine Studies and Designs, but the complete solution of this problem requires that the main steel users themselves carry out programmed studies so as to reduce the trademark dimensions they use, taking measures also in the direction of the changing the technology of processing by expanding plastic and thermic workings and by redoing the construction estimates for the parts and so forth.

The expansion of the technical and scientific revolution with regard to centralization and specialization of the machine industry production is a task of present and future importance for the rapid development of the economy relying on our own forces. Therefore, the party recommends that this problem be correctly evaluated by the party organizations, the state and economic organs and by all cadres and specialists, combatting restrictive concepts and by creating complete convictions about the necessity for the scientific organization of production and by taking concrete organizational and technical measures, in conformity with the present stage of development of our economy in general and of the machine industry in particular.

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PARTY POLICY ON DEVELOPMENT OF FUEL INDUSTRY

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[Article by Veli Mullaraj: "Party Policy on Development of the Fuel Industry"]

[Text] "For development of various branches of industry and the people's economy as a whole, the party has relied above all on the country's mineral wealth and on its appropriation."<sup>1</sup>

Mineral resources form a significant part of the natural resources of our socialist fatherland. Thanks to the party's correct orientation regarding the extension and intensification of geological activities, Albania now has a strong base of mineral resources to meet the growing needs of all branches of heavy industry and the economy.

The various minerals which are lying dormant underground, placed in economic circulation, become mineral resources and a highly important material factor for increasing productive forces. For this reason, immediately after the liberation, the party laid out the task that, of all mineral resources known at that time, those which accelerate the process of building socialism and create the basis for a great advancement of productive forces were to be exploited first and foremost. "To build the new Albania," stressed Comrade Enver Hoxha, "means... to rebuild the various mines, the greatest wealth of our country, and get them functioning well."<sup>2</sup> The implementation of this orientation, which rates the mines as a first class factor for the development of industry and all other branches of the economy, as a true "means" for producing the means of production, laid out the task for the broad development of geological activities which, gauging by the results up to now, have defined the possible wealth of our country and have new horizons for the future.

Our country's workers, technicians and geologists, especially since the 1960's, through their courageous work and conclusions have changed the previous concepts about our fatherland's mineral resources. In conflict with the mistaken views of foreign geologists, revisionists and saboteurs, new methodologies were implemented for research and discovery of resources,



the conclusions of foreign specialists were reviewed and huge mineral resources were discovered even where the revisionists had wanted to bar all prospects.

Mineral resources discovered by our specialists and workers constitute a secure base for the development of our industry and economy, which develops and advances relying on its own strengths. "When you see the results achieved and the prospects which exist for the further development of the country, it is understandable just how correct and farsighted the struggle was which the party waged against the 'suggestions' and pressures of the Yugoslav and Soviet revisionists and the defeatist views of internal enemies who sought to remove our country from the right path which it had selected for socialist industrialism. They endeavored as much as possible to sabotage the development of industry, concealing geological data to prove allegedly that our country lacked raw materials, that it was not worth investing in the mining industry and that it would be better for these funds to be spent on sunflowers and oranges."<sup>3</sup>

Time verified the correctness of our workers' party's general line and Comrade Enver Hoxha's teachings in connection with the base of mineral raw materials and exploded the revisionists' efforts to end all prospects for development of heavy industry, mining and processing in our country. Revisionists of all shades said, for example, that there is no petroleum in Albania, but our country's geologists, under the party's leadership, carved new paths and increased oil reserves in keeping with the needs of the socialist economy. The enemies of the party and people tried to sabotage the development of the oil industry but did not reach their objective. The working class, led by its party, detected and liquidated the hostile activity in time. The oil industry as well as our entire mining industry is now developing complete in accord with the party's orientations, which appraise the fuel extraction industry as a vital branch of our economy and country.

In the initial years of the creation of geologic service in our country Comrade Enver Hoxha, treating the problems of geology dialectically, said, "In this sector let us concentrate our main efforts first of all on determining the most important mines for the country's industry and for export and not disperse our forces throughout the country to conduct research where minerals may or may not exist. Along this path several tasks should be implemented to seek other minerals. Thus we should reinforce the existing base, then gradually discover others which will further enrich our industry. We cannot solve the geology question in a few years and have immediate results."<sup>4</sup> The practical implementation of these teachings is the deciding factor which secured, ever since the fourth 5-year period, the geological and industrial reserves needed for the rapid development of various branches of the mining industry.

Nevertheless, under the conditions of steady growth in the level of the base and the very rapid rate of development of our economy in general and

the mining industry in particular, the party lays out the task for the further reinforcement of geological processes in order to guarantee not only the current needs and those for the near future, but also the long-range prospects for the development of the mining and processing industry.

The harsh imperialist and revisionist encirclement and blockade, the hostile anti-Albanian attitude of the Chinese leadership and the energy and economic crisis of the imperialist and revisionist system posed before our party and people the task of continually reinforcing the mineral base so that our country's economic and social development will proceed with full reliance on our own efforts. Speaking about this problem at the Seventh AWP Congress, Comrade Enver Hoxha stated: "The mining industry, which occupies the main position in heavy industry, provides the economy with very costly and irreplaceable raw materials which constitute the bread of industry and the major source for exporting."<sup>5</sup> The creation and continuous development of the mining industry is a tremendous victory for our party and people and a particularly important factor for breaking the imperialist and revisionist blockade. The implementation of directives of the Seventh AWP Congress is a continuation of the periodic directives of the party and the teachings of Comrade Enver Hoxha under new conditions created by our country's rapid economic and social development, when we are building the material and economic basis of socialism which, as an obvious success of the party's economic policy, simultaneously poses new and greater tasks. Their realization demands strict scientific effort and discipline in order to achieve the greatest possible results at the minimum cost and in the shortest period of time. In connection with this, the application of strict scientific discipline constitutes the main element on which the solution of many other tasks depends. This is because laws derive from generalizations and generalizations derive from precise data obtained from direct observations and, as is known, these directions in mining terms are derived from geological processes which must be implemented in strict scientific order. "Geology is a science with rigid discipline which demands controllable precision in each activity and at each moment"<sup>6</sup> and not guesswork in which the wrong concept might be applied: toss your hat and drill wherever it lands!

Highly rating the effort of geologists, Comrade Enver Hoxha has stated, "They can discover things which are of extraordinary significance to our economy, even more important than petroleum and chrome ore because our subsoil is rich and undiscovered."<sup>7</sup>

Our land is truly rich in minerals. Even richer is the inner world and the socialist awareness of our geologists, raised and groomed by the party with patience and wisdom in the battles of production and the revolutionary class struggle. It is our geologists who, upon receiving a task from the party, busy themselves to determine possible ways to localize mines. A great debate develops between man and mother nature over her priceless secrets. Discussed and resolved through this debate are the great task of continuously increasing reserves at operating mine sites so that the greatest part of

of the increase in mining ore can be met precisely by these mines, the task of increasing reserves at the new mining sites, the task of seeking, discovering and exploiting as soon as possible new types of mineral ore for which our country has favorable geological premises.

Putting the mineral ore into economic circulation and increasing its processing level, under the conditions of the harsh imperialist and revisionist blockade and the economic and energy crisis which has encompassed the imperialist and revisionist systems, an objective necessity is implemented which derives from the general laws of socialist construction, relying on our own efforts. This is because, first, unnecessary importing is eliminated; second, the value of mineral ore grows through the increase in labor input, thus national income increases; third, real possibilities are created for changing from an exporter of mineral ores to an exporter of products manufactured through the processing of mineral ores found in our country.

Likewise, putting mineral ores into economic circulation and increasing the degree of their processing further strengthens our socialist economy as well. These processes in our country are performed under the conditions of unceasing intensification of the technical and scientific revolution in all fields of life. The mineral ores are exploited or are put to use through new modern technology, through which the full and complex utilization of the mineral ores is accomplished. Thus, for example, exploitation of copper ore to produce, besides copper, its other useful components (sulphur, the valuable and rare metals, etc.) greatly increases the economic effectiveness of this mineral, creates real conditions for decreasing their costs and for increasing mineral reserves (without affecting the techno-economic indices and perhaps improving them) which, under the conditions of the very rapid development of branches of the mining industry, assume special significance because they are connected with the prospects for the future, with the party's recommendation to think about future generations.

In this way, real possibilities are created for putting all types of mineral ore needed for industry and the economy into economic circulation and thus whets the cutting edge of the "sword which splits the blockade" and ensures the country's economic independence and power.

Among our country's raw materials, our party has always devoted special attention to fuels. The petroleum industry plays a part in this as one of the most important branches of the economy and as a condition for the rapid development of all other branches. Appraising it in this way, ever since the early post-liberation days, the party took extraordinary measures for the reestablishment of the petroleum industry wrecked by the occupying forces and for its rapid development.

The party's slogan, "Let us consider oil as we do bread," has a profound ideological, political, economic and strategic military content.

It has always been clear to the party that the petroleum industry truly requires fundamental investments and large expenditures but, in every case, these investments and expenditures justify themselves by the increase in oil production. "Naturally, the oil is under the ground and it must be extracted. Therefore expenditures have been and are required but when it comes out of the ground, 'the tap flows, Sopot's water came,' say the Gjirokastrites. This is a beautiful thing. The petroleum industry thus has great prospects before it."<sup>8</sup>

The party's optimism concerning the prospects for the development of the petroleum industry in our country is based on the geological data on our country's oil- and gas-bearing sectors, on strict scientific discipline and well-founded and argued studies which are being conducted following the liquidation of hostile activity in this sector, on the general mobilization of workers in this sector and all our people to achieve positive results as soon as possible in the research and discovery of new resources and increase the extraction of existing resources through the broad scale use of intensifying methods.

The implementation of task of the Seventh AWP Congress will have the effect of producing about 11 percent more oil in 1980 compared to 1975, while producing about 48 percent more gas. In its economic policy for the exploitation of sources of gas and oil, our party has always started with the concept that "it is the duty of our generation to think about future generations."

The party has devoted and devotes just as much importance and attention to increasing the production of coal, that very important fuel necessary for industry in particular and the whole economy in general. Referring to the communists and workers at the coal mines, Comrade Enver Hoxha recommended that "... we understand well that the regular operation of our main industry depends on their work. When shortcomings exist at these mines, industry suffers. Dependent on coal are railroad operations, sugar production, the production of cement and many other things which have to do with improving the standard of living of our people."<sup>9</sup> This conviction has guided all our planning efforts regarding coal mines. Based on this, coal mining is set to double in 1980 in comparison with 1975. The Seventh AWP Congress assigned the task of getting 80 percent of coal production from operating mines and by expanding them. The congress also specified that about 80 percent of the coal produced in 1980 is to be enriched.

These lofty objectives can be achieved if the new mines are put into operation quickly and with economic effectiveness right from the outset, if the existing mines are maintained and coal production from them increases, if coal is absolutely not permitted to burn up on the ground, if the coal enrichment factories operate without interruption and their enrichment capabilities are fully exploited, etc.

The rate of accomplishment of tasks in the coal production plan at existing mines, especially in their various sections, indicates that the reserves



for increasing production capacities are very great. These reserves are found not only throughout the work processes for plan accomplishment (use of work time, accomplishment of norms, the use of mechanized means, etc.), but also in the annual plans themselves, when they are drawn up according to improper criteria, to be on the safe side or based on global and not analytic indicators which take into consideration the high averages achieved in fact at the best brigades, shifts or sectors. Thus, for example, No 2 shaft at Memaliaj in five months yielded 3.095 tons of coal over the plan. However, two-thirds of this surplus was produced by the workers on A shift who used all factors for increasing production better. Naturally, had the other workers done as those on shift A had done, then the surplus would have been 6,075 tons or twice as large. This single example suffices to show how great the possibilities are for increasing the production capabilities in the existing mines. if we get a firm grip on the high average, making it, as the party and Comrade Enver teach us, a compulsory standard to be applied from planning to all eshelons of our socialist economy.

At the Seventh AWP Congress, Comrade Enver said: "The party's directive for coal has been and remains that it is to be used extensively wherever this fuel can be worked with. The calorific force of our coal meets the necessary requirements for the majority of the branches of the economy. Therefore it should not be underrated in any way, as did our enemies who purposefully limited its production, replacing it with oil."<sup>10</sup>

These appraisals and recommendations clearly indicate our party's farsighted policy and correct attitude toward fuel in general, evaluating them as essential elements which determine the rate of development of all branches of the economy. In particular, under the conditions of the energy crisis the capitalist and revisionist systems are going through, the problem of fuel and energy is becoming more critical. The task is that our country should not only meet 100 percent of its domestic needs for all types of fuel but also export as much as possible. On the other hand, the high rate of development of our industry, the modernization and intensification of agriculture, the full electrification of the country and the extension of energy requirements to all fields of life have required and require the constant development of this vital sector for the socialist construction and total economic and social development of our country. The party has always viewed the development of the oil, gas and coal industries as a subject of special political and economic significance which is closely related to the country's total development and to strengthening the independence and defense of the fatherland.

Information on the growth dynamics of general industrial production, the production of the fuel industry in general and that of the oil and coal industry in particular, indicate that production in the fuel industry has risen faster than general industrial production. As a consequence the specific weight of the fuel industry in general industrial production has been growing steadily, which testifies to the strengthening of the energy base of our economy and its modernization.

Since from the technological standpoint fuels reciprocally replace each other, our party has always been aware to define correct proportions in the development of various branches of the fuel industry, depending on the possibilities of each period, with the goal that the production of these substances correspond in time, both in type and quality, to the growing needs of our economy. Meanwhile, it has been kept in mind that fuels are to be used in a rational and effective manner for the socialist construction of the country. Likewise, the party's and Comrade Enver's recommendations to think about the present and the future and to conserve every drop of oil and every gram of coal are also being kept in mind.

Guided by such objectives, in drawing up directives for the development of the fuel industry, our party has always taken in consideration the need for proper coordination of the development of the production of oil, gas and coal as interchangeable products, defining the directions and proportions of interchange, dependent on the objective demands of development and possibilities in the economy and not dependent on temporary or subjective factors. Thus, our party has never constituted the request for the replacement of oil by coal with the non-fulfillment of the oil production plan or with the worsening of technical and economic indices of the petroleum industry, but has considered this request as an objective necessity to conserve oil which represents one of the most effective types of raw material for the processing industry. Thus, the use of oil simply as fuel in those instances when it can be substituted very well with the calorific force of coal is an anti-economic and unjustifiable act.

However, replacement of oil with coal is not a simple technological problem or as easy as it seems at first glance. The replacement of oil with coal constitutes a great ideological and political problem. It expresses the attitudes and concepts of fuel users toward various types of these substances. Oil, as an energy fuel, is used more easily and with less effort and bother than coal, but these enticing advantages are superficial and unprofitable from the viewpoint of the interests of the entire economy, therefore the use of oil instead of coal in these instances means going after the easiest, submission to hardships, misunderstanding of the task politically as the party and Comrade Enver recommended.

Oil, gas and coal, as mineral fuels, are essential for the development and strengthening of the economy and are used very effectively, but in our country this effectiveness is studied under the prism of the interests of the entire socialist economy and not under the prism of particular branches or enterprises as occurs in the bourgeois and revisionist countries. From this stems the great and critical task for the establishment of a strict savings regimen in using them. "The sense of savings," said Comrade Enver, "the conservative use of raw material, especially oil, gas, coal and electricity, should be firmly implanted in the conscience of all our workers. This conservation should take place everywhere: in research, drilling, exploitation, in every place they are used because these substances represent a great and irreplaceable resource for our people and economy. Excessive and unnecessary expenditures hinder the building of socialism."11

Among the many factors which insure fuel conservation, of special importance is the further improvement of planning the production, processing, distribution and consumption of it. Actually, at all eshelons of the economy, the planning of fuel requirements is done only in the physical index. The producing and consuming enterprises contract among themselves for the quantity and assortment but not the quality. As a result, leaning toward the narrow interests to the detriment of the general state interest and to ease of use, several administrators of economic enterprises unwittingly seek oil or gas supplies even when then can use coal quite well. Furthermore, there are also instances when, although requested to use coal in place of oil, the request is not well received and is stonewalled. Why? Among other reasons, this hesitation is rooted in the planning methodology in the fuel industry, which permits the creation of a separation between quality and quantity during the planning stage, which can be avoided if the fuel consumption norms are the tasks for them are planed in two categories: physical and conventional.

The physical category indicates the quantity or volume of fuel produced, processed, transported and consumed by each enterprise. The conventional category indicates the quantity of fuel produced, processed, transported and consumed by each enterprise, but is expressed in standard calorific units: 7,000 kilocalories per kilogram.

In this way, all types of fuel are comparable, having calorific force as a common term to express their quality. This planning further strengthens the savings regimen, increases the responsibility of producers and consumers, especially regarding the quality of fuel, and thus insures complete linkage of quantity and quality indicators and avoids the separation which occurs in the planning operation.

The advantage of using the conventional indicator in relations between producers and consumers is quite apparent. One enterprise which uses 10,000 tons of coal with a planned calorific force of 2,100 kilocalories per kilogram would need 3,000 tons of conventional fuel. If the producer endeavors to improve the quality and manages to supply the consumer with coal that is ten percent higher in calorific force than the planned coal (i.e., coal with 2,333 kilocalories per kilogram) then the consumer's needs would be satisfied with only 9,000 tons of coal. In this way, the social cost of extracting, transporting and using 1,000 tons of coal is saved, the coefficient of beneficial use of fuel increases and all techno-economic indices improve, both for the fuel-producing and the fuel-consuming enterprises. From the standpoint of the interests of the whole economy, the switch to conventional indices is likewise beneficial and insures great savings in all directions. The erroneous concepts and hesitation to replace oil with coal are combatted effectively.

When planning is conducted on the basis of the calorific force of fuel and not on the basis of global and permanent data, then the calculations for replacing oil with coal become more exact and real. In this way, the fuel-

producing enterprises answer for the real values of consumption which they provide to the economy whereas the consumer enterprises follow up and answer better for the use of fuels needed for production.

Under the conditions of a socialist economy where the exploitation of fuel resources is done in a planned way, profound and sound convictions are created to exploit without hesitation and to the limit the resources which contain fuel of a low calorific force, as well as to exploit in a rational way and with criteria those resources which contain fuel of a high calorific force. Thus, planning of the conventional index diminishes the physical volume of fuel, minimizes the work which is actually done needlessly, better relates quantity and quality and increases the consumption values placed at the disposition of the socialist economy. In other words, greater consumption value will be contained in a smaller physical volume of fuel and, more importantly, these consumption values will be created with less social cost.

At the Seventh AWP Congress, Comrade Enver Hoxha stated: "The party's orientation is that in the sixth 5-year period known resources are to be exploited in a more rational manner, the principle means are to be centralized here, new resources are to be put into circulation and the value of our mineral ores is to be increased through enrichment of domestic processing."<sup>12</sup>

This means to continue the process of domestic enrichment and refining of mineral ores at an even faster pace. In the 35 years of the country's liberation and the victory of the people's revolution in socialist Albania, huge steps forward have been made in the enrichment and processing of mineral ore. Serving this goal were and are all the coal, copper and chrome enrichment plants across the country, the copper processing plant at Rubik, the chemical fertilizer plants at Fier and Lac, the "Party's Steel" Metallurgical Complex at Elbasan, the oil refineries and, lately, the deep revining plant at Ballsh, the Iron and Chrome Plant at Mat, etc. All of these affirm the correct and revolutionary economic policy which our party has followed for the socialist construction of the country, giving priority to the development of heavy industry and primary importance to the domestic processing of various ores. Always following this Marxist-Leninist line, the party at its seventh congress launched the following slogan: "... process all minerals locally and cease exporting crude ore."<sup>13</sup>

According to the task assigned by the Seventh AWP Congress, in 1980 the ore processing industry will provide over 65 percent of exports, against 46 percent in 1960. This is a difficult but essential and fully achievable task. It is achieved, first of all, by strengthening the processing industry, and also by further raising the concentration level of extracting useful ores at existing mines, by improving all technico-economic indicators of the mining and processing industry and (when the productive capacities of the processing industry are greater than the maximum production of existing mines) by putting new sites into operation.



The exploitation in turn of these great possibilities which our economy has for the rapid increase in mineral ores is of decisive importance for the present and the future of socialist construction in Albania, for the highly effective exploitation of the country's natural resources and for overcoming every difficulty so the enemy never takes us by surprise and our strong and stable economy never wavers in the face of any imperialist and revisionist pressure or blockade. Thus, first of all, exploit the existing mining resources which, as Comrade Enver said, "... constitute a great wealth therefore neither irrational nor unstudied methods are permitted in exploiting these riches, not is pursuit of a global figure, which in the past have brought about no small harm."<sup>14</sup> This task is fulfilled by not leaving reserves of mineral resources underground, by reducing to the minimum the losses incurred starting right in the planning process, by drafting variant projects for the exploitation of mining resources and selecting the most suitable as evaluated against all indicators and not a single indicator, by establishing complete and effective control over underground exploitation in such a way as to extract the very last ton of ore.

Just as important are the techno-economic indices of the exploitation of mining resources. These improve steadily when care for them begins right during the process of drawing up the task of planning the concept plan and the implementation plan and continues in all other processes of extraction, transportation and refining of ores. Coordination of technical and economic indices with one another starting with the drafting of plans is a highly important factor to avoid going after a total figure, as well as to reinforce the discipline of the plan and financial discipline in the mines. Experience shows that most recently there has been an increase in requests for accountability and a sense of responsibility not only for fulfillment of the extraction plan but also about the assortment, the quality and the economic and financial indices. However, as the Sixth Plenum of the AWP Central Committee observed in January 1979, there are still unexploited possibilities and reserves for these indices to improve even more and, within an even briefer period, to not have any mine cease its economic and financial activity with planned losses. The achievement of this objective increases the socialist accumulation of branches of the mining industry, as an important factor for the broader implementation of the principle of self reliance.

Another way to increase raw materials extracted from mines is to put new resources into economic circulation. For this task, the problem is perhaps more acute than any other case. However, we now have years of experience in the mining industry, trained cadres and sound, broad and strong material, technical and scientific bases which create very fine conditions and full possibilities to be accurate in our forecasts, in drawing up plans and for the selection, establishment and exploitation of new mining resources. However, in this case, the coordination, harmonization and consideration of the political as well as the techno-economic, social and military factors, all closely interrelated, is particularly important. This is because, first, the very problem of opening and exploiting new mining sites is just as much an economic and military problem as it is political and ideological; second,

our country is building the new socialist society under very specific conditions, surrounded by harsh and shrewd enemies, under the constant pressure of the imperialist and revisionist blockade, forced to face the intrigues and treason, the obstacles and troubles which imperialists and revisionists of all sorts are causing, as well as the grave economic and financial crisis of capitalist and revisionist countries, the constant price increases and the grave and destructive situations of the trade in these countries.

Under the conditions where all other factors are equal and discussion remains to come to bear on economic and financial factors, then in real situations it is more useful, among all new mining sites we are aware of, to select for immediate exploitation the site which meets the requirements for increasing raw materials with the minimum of social expenditure. As a result of the priority development of geological work, a broad front of mining sites has now been created for several useful ores which permit this selection, in order to secure large savings within the framework of the whole economy.

Our country is rich not only in various types of fuels but also in other useful minerals. "In our country such high-value riches as chrome and iron-nickel ores, copper and pyrite ores, oil, gas and coal are broadly exploited. Many types of ore have been discovered thus far. Data indicates that our subsoil does not lack the bauxites or the phosphorites, the polymetals and other ores."<sup>15</sup> All of these mineral ores which have been and are being put into economic circulation constitute a secure base for the development of our mining and processing industry and for the effective implementation of the principle of self reliance. The placement of these minerals in economic circulation also constitutes an important factor for the rapid development of the chemical industry, the building materials industry, the light industry, etc. In this whole broad array, the fuel industry has its own essential place of first class importance.

Geological data indicates that our socialist country has huge mineral resources which guarantee economic and social development not only for our generation but also for future generations. These resources are in our hands, in the hands of the people who, under the party's leadership and, this year, mobilized with all their strength to eliminate the grave consequences of the 15 April earthquake and to greet with new successes the 35th anniversary of the fatherland's liberation, will increase them even more and will place them better at the service of the economy and socialist construction.

#### FOOTNOTES

1. Enver Hoxha, "Raport ne Kongresin e VII te PPSH" [Report to the Seventh AWP Congress], Tirana, 1976, p 42.
2. Enver Hoxha, "Vepra" [Works], Vol 3, p 301.

3. Enver Hoxha, "Raport ne Kongresin VII te PPSH", p 42.
4. Enver Hoxha, "Vepra", Vol 13, p 172.
5. Enver Hoxha, "Raport ne Kongresin VII te PPSH", p 42.
6. Ibid, p 44.
7. Enver Hoxha, "Vepra", Vol 13, p 358.
8. Enver Hoxha, "Vepra", Vol 11, p 399.
9. Ibid, p 51.
10. Enver Hoxha, "Raport ne Kongresin VII te PPSH", p 47.
11. Ibid, p 51.
12. Ibid, p 43.
13. Ibid, p 49.
14. Ibid, p 45.
15. Ibid, pp 42-43.

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# BOOK ON PRICING POLICY REVIEWED

Tirana PROBLEME EKONOMIKE in Albanian No 2, Apr-May-Jun 79 pp 137-143

[Review by Mynyr Maska of the book "Aspekte Kryesore te Politikes se Cmimeve ne RPSSH" by docent Sabah Hilmia, Tirana University, 240 pages]

The book is a serious and accomplished effort to introduce and argue theoretically the most important aspects of the AWP economic policy in the price field.

Successfully implementing the policy of price stability and the systematic lowering of prices from year to year, besides the rapid growth and development of general industrial and agricultural production, the standard of living and the per capita real pay in our country have increased and a series of revolutionary and significant steps have been taken to benefit urban and rural workers. Nine successive price cuts have been made since 1960. Thus, per capita income rose 19.5 percent for urban workers and 27 percent for rural workers. In November 1969, in fulfillment of the Joint Declaration of the AWP Central Committee and the Council of Ministers of the RPSH [People's Republic of Albania], prices were decreased by 200 million leks. The measures which were implemented in 1972 to lower the price of the means of production which were being purchased by agricultural cooperatives also served to raise the rural standard of living to where it approached that of the urban areas. The recent measures which have been taken in the field of prices and rural payments are also serving to increase agricultural and livestock production and the redistribution of income within the cooperativist system.

The pricing system and policy implemented by the party during the entire period of socialist construction in our country has caused an increase in industrial and agricultural production, an improvement in socialist relationships in production, the creation of new domestic sources of accumulation and, at the same time, a more accurate distribution and redistribution of national income, having as an objective the continual growth of the material and cultural levels of workers and a narrowing of the basic distinctions between rural and urban living. Effectively pursuing this correct



line, the AWP has provided price stability when in all the other bourgeois and revisionist countries the price index is always rising, there is unemployment and inflation, and regular increases in prices and decreases in standard of living have become customary phenomena.

The book "Aspekte Kryesore te Politikes se Cimeve ne RPSSH," filling a gap in economic literature in the pricing field, constitutes in this field a valuable contribution with an expert and didactic character on the meaning, the role, the formation and the functions of this important economic lever in the hand of the party and our socialist state. It is composed of about 240 pages and covers a broader scope than the title of the book indicates. It consists of two parts and an introduction, where the forming of price is given in the various economic and social formations. The first part treats the forming of prices prior to the country's liberation (1925-1944). The second part consists of two sections and four chapters, with a structure which corresponds best to various aspects of pricing policy in Albania.

The historic treatment of the problem of forming prices in the various economic and social formations as well as in our country prior to the liberation and up to 1944, we think, makes the book an interesting work for making known one of the very grave periods our country has passed through, which was characterized by a backward situation and a slow development of productive forces.

The low level of productive forces, as the book points out, was everywhere. Agriculture was dominated by wooden plows and the work of illiterate tenant farmers who could not even provide their daily bread; in industry, the few backward workshops, with a very low technical and technological level and without technical equipment, barely managed to produce 30 centimeters of textile per person or 9 kw of electricity. The circulation of money in this period was among the most backward and anachronistic. Due to the absence of a unique monetary system in our country, there was in circulation monies of gold and silver and currency of various countries, such as Austrian crown, the Italian lira, the Greek drachma, etc. (p 22).

Ahmet Zog's antinational policy made it possible for Italian financial capital to reach out its claws and swallow up and exploit the country's economy. No price structure existed at that time. The law of value and competition acted with all their destructive force according to the principle, "the big fish eats the small one." The introduction of the pricing situation and pricing policy of this period is presented as a confrontation forced by our country's unprecedented progress, guided by the AWP over three and a half decades.

The criticism which the book makes of the monopolist character of the formation of prices in the capitalist and revisionist countries causes the book to militate for revolutionary education against all those who strive to embellish the capitalist system. The book also serves for recognition and understanding of the piratical policy which the imperialist and revisionist

super powers--international imperialism--are pursuing to enslave, oppress, exploit and suppress people economically and politically and to obtain maximum profits. "Competition and greed for profit," said Comrade Enver Hoxha, "induce the monopolists of various countries to reach temporary agreements and to join into alliances and unions among themselves to split up markets on an international basis for the sale of finished goods and the purchase of raw materials.... Under real conditions, especially now under the conditions of the economic crisis, the monopolists are concluding agreements directly with the governments of capitalist countries for production quotas, prices, sales markets, etc. The existence of such organizations as the European Common Market, CEMA, etc., clearly reflects the economic division which exists in today's world." In the pricing field, this policy means, on the one hand, the application of high monopolistic prices to sell their goods and, on the other hand, the application of low prices (much less than true value) for raw materials they buy from smaller and less developed countries.

The second part of the book, which comprises the major part of the work, treats pricing in the socialist economic and social order and the most important aspects of the pricing policy in the RPSSH up to the present time. It starts with the social argument based on the Marxist-Leninist theory of the essentiality, the role and the economic and social content of pricing as a great political, economic, social and financial issue for socialism. The creative application of Marxism-Leninism to pricing policy in all of the various stages of our country's economic and social development runs through this work like a red thread. The role and function of pricing have been correctly evaluated as an important means for the planned management of the socialist economy without underrating or overrating the role of this economic tool, as the modern revisionists are doing. The author has argued broadly and clearly with facts and figures the formation, role and importance of pricing for the distribution and redistribution of national income between agriculture and industry, for securing internal accumulation for the needs of the socialist industrialization of the country and the collectivism of agriculture, for the implementation of the fundamental law of socialism on the steady increase in the people's well-being and for reducing the inherent distinctions between urban and rural life.

The action and influence of the law of value in the circulation and production spheres are given proper coverage in the book. Right at the outset the author acquaints us with the effective Marxist-Leninist policy followed by the party: "The AWP, aware of the role and action of value in the circulation sphere, in setting the rate of prices for individual consumer goods, has kept value in mind--the law of value--. socially essential work spent to produce goods. In everything done to form prices, it has been kept in mind that the value of goods, as a crystallization of social endeavor, and

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\* Enver Hoxha, "Imperializmi dhe revolucioni," Second edition, Tirana 1978, pp 110-111.

its size depend on the amount of social substance it contains." (Page 60). The action and influence of the law of value does not extend only to the circulation sphere but also to the production sphere. In his analysis of the subject, the author reaches the correct conclusion that this law in the socialist economy does not and can not have a regulatory function as in the capitalist economy. "The state organs which deal with pricing," states author S. Hilmiä, "when planning (fixing) the price of goods, base it on value. At the same time they take into account, besides the cost factor, all other political and social factors as well as the quantity of goods produced for marketing and the public demand for each item." (Page 61). Therefore, aside from this, the book also treats the conscientious and planned separation of pricing from value, as well as the factors which make this necessary, as a characteristic of the role of prices in socialism. The conscientious and planned separation of pricing from value in our country is determined, first of all, by political and social factors, to serve to strengthen the dictatorship of the proletariat, to secure proper rates in the distribution and redistribution of national income between branches which produce the means of production and the means of consumption, between industry and agriculture and between the accumulation fund and the consumption fund, for the conscientious and planned harmonization of supply and demand, for the implementation of the fundamental economic law of socialism, for closing up loopholes which create capitalist or revisionist elements or social groupings in the population.

The spontaneous and anarchic action of the law of value, behind the backs of producers and consumers, has been and remains a fundamental characteristic of the capitalist economy, the existence of private ownership of the means of production, open competition and anarchy in production, etc. The author likewise analyses the capitalist and anti-Marxist effect of the law of value in the revisionist Soviet Union, which long ago changed into a typical capitalist and monopolist country. A component part of the "economic reform" which has been implemented there is the "wholesale price reform" which is based on the bourgeois theory according to which, in the socialist order, "the deeper the social division of labor becomes, the greater becomes the importance of the production of goods and the law of value assumes primary importance." Continuing on this point, the author stresses that "by accepting this thesis, the modern revisionists open a broad sphere to the action of the law of value, reserve for it the conditions of the capitalist economy, which is based on private capitalist ownership of the means of production and on the exploitation of labor...and extend the sphere of action of the law of value to include the products of the first distribution of social production, the means of production, etc." (Page 187).

The first chapter of the second part begins with the most important event in our country, the First AWP Congress, which defined the orientations for building the economic basis of socialism. The author analyses the tasks which had arisen at that time for our country which had just emerged from war, collapsed, with an economy where small peasant production and economics predominated. Among these tasks were the development of urban and rural

productive forces, the establishment of relationships between industry and agriculture, between the city and the village; furnishing agriculture with farm machinery, select seeds, chemical fertilizers and credit; the implementation of a fair taxation policy and other forms of exchanging products between city and village, as a great aid and support for agriculture by the state.

A component part of this economic policy was the just pricing policy implemented for industrial goods and agricultural and livestock products. In the book, a detailed analysis is made of the main characteristics of this policy, summarized in the pricing order of 1949, according to which prices were fixed in a centralized and planned manner, in keeping with the demands of the fundamental economic law of socialism, combining current interests with those of the future, to stimulate local production and protect the nation's industry, etc. This analysis points out the important aspects of the creative and successful implementation of the pricing policy in this period, such as was the fixing of differentiated retail prices for rationalized goods and for the state open market, as well as the fixing of agricultural produce prices which was implemented during the years 1949-1957 and which helped to normalize trade and money. An important role was also played by prices under a purchasing contract system and tariffs for machine tractor station operations, combined with the form of issuing 20 to 40 percent prepayment for agricultural operations, which stimulated material interest for the expansion of production and for fulfillment of rural needs for industrial goods. The author then analyses the successes achieved in our country regarding the creation of the economic basis of socialism, the growth of industrial and agricultural production and the further improvement of the pricing system and its form, which would further increase its role and functions.

The second chapter treats the pricing policy at the service of the complete construction of the socialist society. It is pointed out here that the AWP has considered and does consider that the building of socialism along with a developed industry demands an advanced agriculture which forms the basis of the economy from which, to a large extent, the fulfillment of tasks in other branches of the economy depend and are determined. Agriculture, producing food locally, resolves critical political objectives as well as those relating to the independence and defense of the fatherland. The policy of agricultural and livestock product purchase pricing, the tariffs implemented for the machine tractor stations, giving priority to cereal grains, etc. have also served to attain these objectives. The author stressed that the pricing policy has served the correct distribution and redistribution of national income in favor of hilly and mountainous cooperatives, taking into consideration that the income of lowland cooperatives had risen at a faster rate, both because of investments made in them and because of the prices of industrial crops. Pricing, therefore, as one of the important instruments in the hands of the socialist state, along with other tools and measures, applied carefully and creatively, has played and plays an important role.



The third chapter treats the formation of wholesale prices and their role in the development of the economy. Presented in this chapter are the principles and criteria for forming them in compliance with the requirement of economic laws and the tasks set forth by the party in the various stages of economic and social development. They occupy an important spot in the pricing system and have a very broad application. Related to them are the securing of accumulation and a series of other important matters.

The analysis of criteria followed for the formations of wholesale prices in the various branches of the economy and the extent of their treatment, the paths followed to improve their formation and the generalizations derived from this experience clarify and supplement the knowledge in this field and on the pricing policy implemented by the party. Special importance has been given to the knowledge and treatment of certain properties of wholesale price formation which are related to the acceptance of group ownership, special natural conditions, the need for expanded reproduction, the state's participation in mechanized operations through machine tractor stations, the investments it makes, the need to withdraw a portion of centralized net income, the existence of differential rent in both of its forms, clarifying the price forming policy and the need for redistribution of income directly within the cooperativist system, and it is stressed that this can be accomplished only through the aid of the socialist state.

A special place is also devoted to the formation of fruit and vegetable prices, pointing out the properties they have in contrast to other products, being seasonal products and where supply and demand, spoilage, immediate consumption, etc. are very influential.

As a whole, the work correctly treats the role and importance of wholesale prices. Seeing the dynamics of their formation, the book generalizes the experience and achievements in this field. Having a relatively broad scope, a clear presentation is made of the political and economic goals of the formation of prices, planning on the basis of the high average, the increase in demand for domestic products in comparison with imported ones, the further increase in agricultural development and industrial production and the rational exploitation of raw materials and all of the country's energy resources.

In these three chapters, generalizations are made about accomplishments and realizations and valuable ideas are presented about the future of price formation, as a valuable contribution toward knowledge of theory and practice of price formation and the creative implementation of prices under our country's conditions. However, we feel that the book would have been more complete and would have made a greater contribution had it spent more time and devoted more attention to the policy and criteria implemented for the formation of wholesale prices for imported and exported goods and the two-price movement of goods which go to group A enterprise and those which go to group B enterprises, as fields less discussed and less known by our cadres and economists.

Actually, when our economy conducts foreign trade activity under the conditions of conjunctive prices and when this activity continually expands, the theoretical treatment of criteria implemented up to now on problems of economic advantage would complement the work with another important aspect of great practical benefit. It is this aspect, I believe, which needs to be processed and concretized by our economic minds as a need for specific activity by economic organs.

The implementation of the party's policy for the formation of retail prices, the composition and structure of these prices and their sphere of action and role in the distribution of income make up the content of the fourth and final chapter of the book. It describes, first of all, the party's special care to implement a prudent and perspective policy which correctly combines the needs of economic development with the systematic improvement of the wellbeing of the working masses, which stimulates increased local production of consumer goods and increased demand for them, which influences improvement in the structure of goods circulation and the growth of real pay, implementation of a just social policy, setting favorable prices especially for children's articles and raising the hygienic and sanitary level in city and village. Treating the implementation of retail prices on the basis of a unique, centralized and stable policy with an eye toward reducing them, the author draws a series of accurate conclusions from our experience.

The way in which it grasps, explains and analyses the problems makes the book, "Aspekte te politikese cmimeve ne RPSSH" by docent Sabah Hilmia, a valuable, expert and didactic work useful not only to students but also to employees of state and economic organs.

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# GROWTH OF BULGARIAN MERCHANT MARINE DESCRIBED

Moscow VODNIY TRANSPORT in Russian 8 Sep 79 p 4

[Article by Nikolay Yovchev, general director of the Water Transport Economic Association: "Over the Seas and Oceans Under the Bulgarian Flag"]

[Text] Bulgaria has its maritime history and traditions. In the various stages of the history of the Bulgarian state, the sea has always been one of the most important factors in the development of its economy as well as a rich and inexhaustible source of resources. In appreciating the enormous role and significance of the sea for the economy, the BCP and the Bulgarian government has constantly been concerned for building the material and technical base of water transport, shipbuilding, commercial fishing and tourism.

Water transport which began its activities after the victory of the socialist revolution, in having only several small sailing vessels and wooden piers, has honorably carried out the legacy of Georgiy Dimitrov of creating a large maritime and river fleet in the new Bulgaria. At present Bulgaria possesses a fleet of merchant maritime and river vessels with a tonnage of over 1,700,000 tons. The largest enterprise of the Water Transport Economic Association, the Bulgarian Maritime Fleet Navigation Company, operates nine lines on the Black, Mediterranean and Adriatic seas, in Western Europe and the Far East. Now there are modern vessels with good technical and economic indicators built in Bulgaria, the Soviet Union and other countries for transporting loose cargo, tankers, universal vessels and powerful ferries, as well as high speed passenger hydrofoils.

Bulgarian water transport handles over 80 percent of the nation's exports and imports. It is successfully carrying out its tasks in providing transport services, it is strengthening its transport ties with the USSR, and is developing international operations in the area of navigation. Port installations have been built for fleet requirements on the sea and the Danube. Ship repair facilities are being expanded and improved and in the next few years these will provide repairs on about 85 percent of the vessels of the merchant fleet. For improving transport operations and cargo transport, a ferry complex was built for the Varna--Il'ichevsk line, and this is the largest and most modern in the world.

The development of the maritime fleet has confronted shipbuilding with the responsible task of building large-tonnage vessels which meet modern requirements. For this purpose a new material and technical base has been created. New modern production capacity has provided an opportunity for the Bulgarian shipbuilders to master the construction of vessels with a tonnage of 23,000, 25,000, 38,000 and 100,000 tons. Today the vessels built by Bulgarian shipwrights ply the seas not only under the tricolored flag of Bulgaria, but also under the flags of all the socialist states and other countries.

Commercial fishing has also been widely developed. At present the Fisheries Economic Association in Burgas has 28 trawlers and 8 refrigerator transport vessels. The catch has risen from 4000 tons in 1964, the first year the fishing fleet was organized, to reach over 49,000 tons in 1976.

Sea tourism is also developing rapidly, and at present it can provide tourists with 370 first-class hotels with 80,000 beds. Domestic tourism is also developing along with international. Tourist and resort complexes such as Golden Sands, Friendship, Sunny Beach, Albena, Rusalka and others have altered the appearance of the Bulgarian Black Sea Coast.

10272

CSO: 1823



BARCAK INTERVIEWED ON FRG-CSSR TRADE RELATIONS

Duesseldorf HANDELSBLATT in German 19 Sep 79 p 17

[Report on interview with CSSR Minister for Foreign Trade Andrej Barcak by Christa Meyer-Koester: "Free Access to Market Precondition for Trade Expansion"]

[Text] Czechoslovak sources have said time and again that the FRG is the CSSR's prime Western trading partner. On the other hand, the CSSR represents an extremely interesting market for FRG firms, which requires a great deal of attention. In an interview with HANDELSBLATT, Andrej Barcak, the CSSR minister for foreign trade, spoke about the chances for bilateral trade and about his country's economic problems.

In light of the increase of CSSR exports to the FRG by 10 percent during the first 5 months of this year and CSSR imports from the FRG by 9 percent, Minister Barcak offers this view of the prospects for bilateral trade: "The entire development of CSSR-FRG trade relations has been characterized by a positive upward trend thus far. We have no reason to doubt that this trend will continue during the second half of 1979. The interest of both sides in expanding economic cooperation is further evidenced by the increasingly intensive contacts between leading figures from both countries."

Engineering products accounted for about 12 percent of total CSSR exports to the FRG in 1978. The figures for the first half of this year have been approximately the same. Judging by orders currently on hand, these figures may increase somewhat by year's end. As for the composition of Czechoslovak exports to the FRG, i.e., the export of engineering products, it is worth noting that the demand for our machine tools is steadily rising.

The CSSR, however, is not only a traditional machine-building country; chemicals are an acknowledged growth industry in great need of Western capital goods. Speaking of the capital required to import these

technologies, the minister told HANDELSBLATT that the Sixth Five-Year Plan for the development of the CSSR economy has already made allowances for the importation of investment capital and machinery for the chemical industry as well as for the exportation of intermediates and final products, increased domestic demand in the CSSR itself notwithstanding. The plan has, of course, also taken account of the need to budget for the payment of these imports. "I therefore do not anticipate any difficulties in this regard," Barcak said. "In the main, we pay for our imports through our export of machines and engineering products."

#### Cooperation in the Energy Field

In view of the oil crisis, the FRG is giving serious thought to using coal as a raw material in the chemical industry. The question is whether the two countries might conceivably cooperate in this field. "Cooperation along these lines is not only possible," Minister Barcak said. "In our opinion, it is quite necessary. Your question is the more interesting, since this particular problem is of concern to the chemicals and energy study group, which has been at work for several years as part of the mixed commission created by the treaty on the development of economic, industrial and technical cooperation between the CSSR and the FRG concluded on 22 January 1975. The topic to which you are referring is one of the problems on which the aforementioned group is working."

In reply to the question of what obstacles might presently stand in the way of trade expansion and closer cooperation--thus far only 20 such agreements have been concluded between CSSR and FRG enterprises--Foreign Trade Minister Barcak had this to say: "Your question touches on two problems. The expansion of trade relations depends not only on the economic potential of the two countries but also on whether goods of one country have free access to the market of the other. Permit me, in this connection, to express some concern about the fact that there has been a discernible trend toward protectionism on the part of the West German authorities in the recent past.

Such practices are neither conducive to expanding reciprocal trade relations, nor to a further rise in FRG exports to the CSSR. A limitation of Czechoslovak export opportunities to the FRG market understandably makes for uncertainty among the Czechoslovak foreign trade organizations. It does not, as a consequence, serve to uphold the continuity and stability of our reciprocal trade relations.

As for industrial cooperation, it is correct to say that the number of cooperative ventures agreed upon by Czechoslovak organizations and West German firms has thus far been relatively limited. It is also true that this is a fairly new form of cooperation and that the partners are somewhat hesitant about entering into it; in other words, those responsible for day-to-day trade relations between the FRG and the CSSR have not fully accepted the concept as yet. Still, there are no doubt good prospects for just such

a relationship. A number of topics are currently under discussion--as far as expansion of cooperation in this sphere is concerned, I am an optimist at heart."

In contrast to other CEMA countries, Czechoslovakia applies a rather narrow definition to the concept of cooperation, in fact limiting it to joint industrial undertakings. As the minister said, there is some disappointment about the fact that impulses for cooperation are invariably expected to emanate from the CSSR. One could well envisage joint projects in the fields of engineering and machine tools as well as in the manufacture of household electronic appliances.

#### CSSR Wants To Buy Licenses

Closely tied to the cooperation issue is the subject of licensing agreements. At the opening of the Brno international machinery exposition, the foreign trade minister had already made it unmistakably clear that the CSSR is interested in purchasing licenses on a continuing basis. But, new kinds of problems may conceivably arise in this field. As an example, a western country recently sold to the CSSR a license for a hydraulic system which has too many applications for a small industrialized country to utilize fully on its own. In the view of the CSSR, the Soviet Union should play a larger role in the production based on this particular arrangement than originally envisaged by the licensor. The agreement therefore needs to be renegotiated.

Minister Barcak has some very clear ideas about the subject of cooperation as well. He believes that agreement on the conditions of such arrangements should be reached on the government level, but that the actual details should be worked out jointly by the enterprises concerned. The CSSR considers undertakings based on joint ventures particularly attractive because they are not subject to any export restrictions whatever.

Western banks have taken special note of the fact that the CSSR--a country quite reticent about seeking credit as a rule--has already been on the Euromarket twice this year as a borrower. Asked whether this should be viewed as an exception or as a fundamental shift in indebtedness policy, Foreign Trade Minister Barcak said: "There is no reason to think that this recent development in the credit sphere reflects a basic change in Czechoslovak government policy. Let me point out that the buying and selling of machines and equipment against credit has become a widely accepted practice throughout the world in recent years. And so, we sell against credit and, wherever customary, we buy against credit. But, I am sure we could achieve a balance between our imports and exports, if we utilized our economic capacities to the full. But, if this should prove impossible for a variety of reasons, we would have to resort to credit from time to time in order to satisfy our import requirements.

It is generally known that, like other European countries, we are forced to buy large quantities of grain because of this year's bad harvest. This is an exception and, happily, our economy is equipped to handle it. But, I do want to stress that this particular occurrence does not signal a change in our credit policy. It simply means that we do resort to credit on occasion, like everyone else. Ever since socialist Czechoslovakia came into being, there has not been a single instance of the CSSR not meeting its obligations punctually.

This, in fact, is rendered impossible by our system of planning. Our system does not resort to credit in order to saddle the next generation with our debts--a position which was reiterated by the president of the CSSR in his recent speech at Ostravna--but we mobilize all our inner resources so as to overcome all external influences and such concomitant problems as might arise in the shortest time possible."

9478

CSO: 3101



## SSR TRADE UNIONIST ON TASKS OF RAILROADS

Bratislava PRACA in Slovak 22 Sep 79 pp 1, 2

/Article by Karol Halasz, Chairman of the Railroad Workers Union/

/Text/ The significance and importance of the railroads for all facets of society is attested to by the constant attention devoted by the highest party and state organs to the further technical development of the railroads and the stability of the work force so that they are in keeping with the tasks which the national economy places on the railroads.

Celebration of the railroad workers' holiday is always a good opportunity to evaluate the past year for the railroads, but also for mobilization of efforts to complete the transportation plan at the end of the year. After a relatively successful completion of tasks in the third year of the Sixth Five-Year Plan, particularly with freight, the start of 1979 was not really very successful for well-known reasons. The railroad workers made great sacrifices in their efforts to keep rail transportation moving under exceptionally bad weather conditions during the winter, but at the same time it was clearly revealed that insufficient preparations had been made for winter operations. The shortfall in freight for 8 months amounts to 980,000 tons in the district of the Eastern Line alone.

However, after a successful month in July when 150,000 tons of freight over the plan were handled, it appeared that there was a reversal in the fulfillment of this important indicator.

The trade union organs and organizations of our union tried to get the greatest possible number of railroad workers to take on commitments in honor of the 35th anniversary of the Slovak National Uprising. The conditions were created in the new nationwide movement "With the Train of the Sixth-Five-Year Plan to the Mark of Quality" which was joined by over 85 percent of the working lines and in the nationwide contest "What the Miners Dig Out the Railroad Workers Will Haul." The commitments amount to a value of over 39 million crowns. It is therefore to the point to ask why we are not succeeding in meeting the decisive tasks in terms of volume and the main qualitative indicators of the plan.

Along with the objective reasons which are generally known, we consider the deficiencies to lie in the direction and regular evaluation of socialist competitions and the initiative of the workers in general is one of the subjective reasons for not fulfilling the tasks. Economic workers and trade union functionaries at all levels bear a common responsibility for this situation.

At the same time, the collectives which won the red banner of the line chief and the Line Committee of the Revolutionary Trade Union Movement have shown that it is possible to achieve good results and still perform quality work. This includes the Nove Zamky and Presov Train Stations, the Leopoldov locomotive depot, the Kosice-North line operations, and others.

Saving fuel and energy is one of the primary tasks for rail transportation as well. Even though in the first half of the year there were relative savings of 6,872 tons of solid fuel, over 4.4 million liters of motor fuel and 10.84 million kWh of electrical energy, there are still large savings to be made. In this area there is a wide range of activities, especially for the BSP [expansion unknown], inventors, and improvers in the fields of locomotive and electrotechnical economics. But savings in motor fuel and electrical energy are also in the hands of dispatchers and expeditors who can effect consumption by proper and economic utilization of locomotives in transportation.

One of the important prerequisites for the railroads to successfully fulfill the goals of the transportation plan is more intensive cooperation with the shippers. The instructions for further application and improvement of this cooperation are found in the principles of URO [expansion unknown] for competition of trains and feeder stations. Results from the beginning of this year show that not all of the decisive shippers who have trains have understood this competition. Of 120 shippers asked, 56 joined in on it. Moreover, key shippers have stood aside from it, such as Niklova Ironworks Sered, Banske Construction Prievidza, Povazske chemical plant Zilina, BEZ Bratislava, Juhocukor Dunajska Streda, and others.

Within the framework of this competition, one can positively rate shippers who pay attention to preventing damage to cars and moreover help the railroad to repair them. One should mention here mainly Slovnaft Bratislava, CSPD Komarno, Velkobanu Handlova, Banu Cigel, and the Ladce Cement Works.

Today's holiday is also an opportunity to evaluate those branches of railway transportation which do not participate directly in shipments but create for them an uninterrupted and safe course in the essential conditions. The railroad construction personnel in Slovakia are now carrying out a demanding task on the "southern line" and other decisive construction projects which have as their goal the increasing of the capacity of stations and the throughput capability of the lines in Slovakia. They have taken over considerable tasks in the North Bohemian kraj. Even with the considerable difficulties in moving workers and construction machinery, they are determined to fulfill their mission honorably.

No less honor is due the workers at the railroad repair shops and machine works in Trnava, Martin-Vrutky, and Zvolen. They achieve good results in fulfilling the plan for periodic repairs of locomotives and railroad cars, and do this despite continuing difficulties with spare parts and the reconstruction of the repair facilities.

We would not be good managers or trade union functionaries if in taking this opportunity for evaluation of our work we forgot the area of concern for the workers. In the past year there has been a lot done for the railroad workers in this area. Very important actions were taken which are intended to stabilize the railroad labor force. These include, for example, wage increases for the key transportation professions, stabilization bonuses, free meals at night, a week's extra rehabilitation vacation for some jobs, and a number of other important benefits. In comparison with the past, railroad workers now receive more apartments and passes for domestic and foreign recreational trips from the Revolutionary Trade Union Movement.

However, we cannot be satisfied with everything. We still note a number of fatal or serious work accidents, many work areas do not meet hygienic requirements, and there are not enough shelters for women, factory dining halls, or meal issue points.

By the end of the year we must meet the demands for shipment of the priority foundations for our electric power plants and iron works, move the agricultural products which have prospered happily for us all to their designated points, and assist the plants in meeting their export tasks. This requires an active participation and extraordinary efforts on the part of all railroad workers, from the switching personnel to the chiefs at all levels. We trade union functionaries are expected to clear the tracks for such efforts.

6285

CSO: 2400

COAL MINING PROBLEMS, SITUATION REVIEWED

Black Coal Basin Problems

Praque HOSPODARSKE NOVINY in Czech 14 Sep 79 p 8-9

/Interview with Eng Milan Povolny, Head, CPCZ Central Committee Department for Fuels and Energy and Eng Rudolf Otava CSc, General Manager, CKD /Ceskomoravska-Kolben-Danek, National Enterprise/ by Jaroslav Pasta/

/Text/ The Ostrava-Karvina coal basin (OKR) is situated in the Karvina okres, in the city of Ostrava, with two of its mines in the Frydek-Mistek okres and a minor part in the Opava okres. It is part of the Upper Silesian basin where black coal and coking coal, indispensable for our metallurgical industry, is mined. In this sense it holds a monopoly position in the CSSR. The basin is also a coke producer and a minor supplier of coal for power plants. The basin constitutes a minor part of extensive coal deposits situated primarily on Polish territory. This is also the reason for the close cooperation between the Katowice and Ostrava miners be it in research, development, foundation, driving, mining or transportation technology or in mine rescue work in which both sides possess rich experience. At the same time the basin is a place where work initiative flowers, where comrades Sakmar, Zabcik and others earned the title "Hero of Socialist Work" helping solve problems in the preparation and mining of coal by their pioneering approach. Discussion of these problems with Eng Milan Povolny, head of the CPCZ Central Committee Department of Fuels and Energy and Eng Rudolf Otava, CSc, general manager, CKD confirmed that the tasks are indeed very exacting.

/Question/ It would perhaps be helpful for a start to cite a few figures from your coal basin.



/Otava/ Yearly 24.5 million tons of coal mined in the OKR of which 18.7 million tons is coking coal. It is the only coal region in the CSSR where foundry coke is produced, roughly 3.7 million tons. But coal mining and coke production are not the only activities, building construction, machine building and agricultural production and gas production on a considerable scale are also part of the enterprises, in other words, all these activities form a single integrated complex. For example, natural gas production from carbon amounts to 270 million cubic meters and consumer gas to 135 million cubic meters.

/Povolny/ It needs to be said that the basin is a highly important component of our fuel and power base especially also because drawing off methane from the mines improves microclimatic mining conditions, reduces potential mine explosions and of course makes the formerly wasted gas available for use by our population. Consumer gas production, together with the gas removed from the mine shafts, is of the order of 500 million cubic meters annually, no mean quantity considering that it constitutes the equivalent of roughly 270,000 tons of black coal.

The OKR has a large engineering, designing and construction capacity but it still does not suffice to insure the fulfillment of the tasks vital for the development of the basin which forces the general management to limit work for foreign customers be it in the area of design and construction work or in engineering production including even orders accepted in the past.

Successes, Production Records, but also Shortcomings.

/Question/ How is the coal mining being fulfilled now?

/Otava/ In the first 3 years of the Sixth Five-Year Plan the plan has been fulfilled by 60.4 percent and not a single shaft or mine in either the Karvina or Ostrava part lags behind just as the other eight integrated enterprises and the six service organizations of the concern. But we are not able to meet the daily production quotas and the above results are being achieved by means of Saturday and sometimes even Sunday shifts at the cost of personal leisure of our miners. Besides, the geological mining conditions are worsening markedly which means that more labor has to be expended to mine a tons of coal than in the past year. Greater mining depth means a worsened microclimate primarily with respect to temperature, greater need for ventilating shafts, increasing the size of their profiles and air conditioning. The need to prop up shafts and the sudden dangerous manifestations of great pressures such as earth tremors or coal or gas breakthroughs--all this requires more labor but also places greater physical and psychological strain on miners.

The good results in coal mining or the production of slurry are being achieved primarily due to the dedication of our miners. The foremen and leaders of brigades of socialist work participate in various competitions placing

great demands on the fulfillment of quantitative and qualitative indicators. The successes are remarkable not only because the purpose of the competitions is well understood but also because favorable conditions are being prepared for them. Production records are the "spice" and exhibit a rising trend. For example, in the first 6 months of this year comrade Priesnitz from the CSM mine came out first by mining more than 1 million tons of coal and this year, together with his crew, he became the first 200,000 ton foreman.

[Question] But let us turn to shortcomings and problems. One of them is uneven daily output. What is the cause of it and how is this problem being met?

[Otava] The uneven fulfillment of daily quotas is due to worsened geological mining conditions. We are faced with the necessity of mining so-called saddle seams which used to be an exception in the basin. Today more than 30 percent are such seams characterized by tremors, uneven thickness of the seams, complicated coal stratification and overburden deposition. This represents an impediment to mining machines because these are naturally built to mine coal, not rock. In 1978 alone, these obstacles--calculated as lost production--amount to more than half a million tons and are responsible for the uneven fulfillment of daily quotas and the need to make up the lost production by Saturday and sometimes also Sunday shifts. We do not have machines suitable for all types of coal seam deposits and many machines suitable for all types of coal seam deposits and many machines are considerably worn; scraper and belt transporters, for example, by 75 percent. There are also subjective shortcomings in organizational and management work at all levels.

#### Coal Lost in a Pond

[Question] Among the problems--and some of them are obviously difficult--you are also faced with problems related to machines. Not all equipment is probably to your liking or meets your needs and causes problems. Can you comment?

[Otava] We regret that our traditional suppliers of technological equipment, which is vital to mining coal, have turned their backs on us and have in their enterprises essentially changed their production programs. I am talking about the Skoda Works in Plzen, the CKD, the Vitkovice Iron Works and also other enterprises.

This involves primarily vertical transporters, monopoly products of the CKD and the Skoda Works, machines for final finishing of the substrate and spare parts for coal preparation plants and many for machines which for lack of spare parts had to be practically discarded. It involves also horizontal transportation, scrapers and belt transporters and, of course, spare parts for them. Last year alone, because of lack of spare parts for our preparation plants, we had to release approximately 120,000 tons suitable for coking into sludge ponds which represents a great loss.

[Pecvolny] The fact that the other branches of the national economy fail to pay enough attention to the needs of the fuel and energy base which includes the OKR--as the letter of the CPCZ Central Committee presidium dated 20 September of last year has stressed and as letters dated 12 and 22 June of this year reiterated--has considerable consequences. Because of the needs and requirements of the domestic market and partly also of export needs the miners must quite frequently work overtime, mainly on Saturdays. The measures we are preparing are designed to limit Saturday work or abolish it altogether. In other words, to make the sixth free day in the week not an exception but the rule.

Shortcomings on the part of supplier organizations are the cause for the ineffective utilization of coal deposits on one hand and for the not quite satisfactory quality of the delivered coal on the other. The miners' work is made difficult, unnecessary breakdowns occur which of course is why the lost time has to be made up by overtime work etc. Party organizations in the above-mentioned and other enterprises and VNJ's must again analyze the position of the Central Committee presidium of the party of 22 June 1979 but at the same time evaluate the degree of fulfillment of their deliveries to OKR both with respect to volume and quality and, of course, also to the entire fuel and energy base.

[Otava] At the present time--and I mean the Sixth and Seventh Five-Year Plan--we cannot do without Saturday shifts, but this is not our permanent program. The objective is to abide by the 260 day working time. But to meet the needs of the national economy we must produce the above-mentioned 24,500,000 tons. This means that, to the extent that daily output permits i.e., in some mine shafts because of the lack of vertical capacity, because of poor air quality or defective ventilation and because of other problems, we are forced to work roughly 22 Saturdays at 75 percent of normal daily capacity to fulfill the desired production volume. This represents approximately 1,300,000 tons of coal i.e., the annual yield of one medium-sized mine in our basin.

This represents a labor requirement of about 3,200 workers: the labor of workers and one such mine output must be made up by Saturday and sometimes even by Sunday shifts. The Federal government resolution No 92/1979 calls for the gradual recruitment from 1981 till the end of the Seventh Five-Year Plan of additional workers to eliminate the need for Saturday work in the mines and guarantee a six-day output--we call it "non-traditional"--with a five day work week and thereby also gradually meet the legally mandated 260 day work year.

#### Safety and Health First

[Question] The OKR is known for its considerable methane levels in all mine shafts so that every worker must deal with the problem of safety as a first priority. But the experience from recent years teaches that everything possible was not always done. The tragic accidents which occurred at the Staric and Cs.Armandy mines come to mind.

[Otava] You are right, the tragic accidents convinced us that there can never be too many safety precautions. Compared to 1976 some 1,000 additional workers are employed in this oblast. We were forced to this measure by worsened geological mining conditions, breakthroughs, tremors, methane exhalations, primarily in new mines, and of course by the need of new operations which mining in the past did not require. I speak of the adoption of active measures against earth tremors requiring a great volume of drilling operations and other measures. For example, the maintenance of proper air quality by more intensive ventilation and the use of air coolers of which we have 45 and which are increasing in numbers and the maintenance of traditional safety installations in perfect working condition. Much money is being invested in new technology and safety equipment to steadily raise work safety in the mines.

[Povolny] Work safety is of great concern to the entire management sphere, all technical and management personnel but also to the trade union movement. What is needed is a regularly conducted educational campaign and the introduction of a number of preventive measures because many cases of flouting safety regulations and thereby increasing the potential danger of accidents is sometimes due to peoples' negligence. Systematic concern on the part of trade union organizations, mine work safety inspectors and party organs at individual mine shafts is indispensable. An occasional campaign will simply not do, only systematic educational work. And sometimes workers who have or are repeatedly breaking safety regulations must be taken to task.

[Question] Hand in hand with work safety goes concern for people and their health. Since in your case work is carried on underground the question may be of vital importance, or is it?

[Otava] Certainly. Considerable attention is being paid in our coal basin to recharging the vigor of workers because we are aware that a physically fit and mentally alert miner, a miner at the pillar and at the face, is a successful worker. Workers have occasion for recreation during vacation periods but also in the course of the year in our recreation centers which can accommodate 5,500 overnight guests. Vouchers are given out for trips to Yugoslavia, Bulgaria, Poland and the Soviet Union which in addition to being desirable offer mental and physical recreation.

In addition, individual shafts have well equipped health and sport centers including saunas, swimming pools, preventive therapy, in short facilities for the care of workers are of high standards which is nothing unusual because miners, especially younger ones, need such care.

Summer More Difficult than Winter

[Question] This year's winter was exceptionally and extremely harsh. How did you cope in such conditions and do you think of winter now when it is summer?



[Otava] We have paid considerable attention to the tasks arising from the resolutions passed by the party and government Central Committee under the well-known name of "Preparations for the winter." Especially party organs and the personal concern of and supervision by officials left nothing to chance. Even though we were relatively well prepared for the winter we were mindful of what even a small oversight can cause or underrating the signals which we were receiving to insure instituting measures necessary for the winter.

I can state openly that we had no special problems last winter. In other words: we had no difficulties which would markedly affect our work in our coal basin. On the contrary, we fulfilled the excess requirement for 100,000 tons of coal in the fourth quarter and fulfilled the first quarter coal mining quota by 26 percent of the annual plan. Therefore, the workers in our coal basin were able to cope with the winter and we will again apply the experiences gained thus far next winter.

This summer measures are being implemented in our coal basin which we find to be much more complicated and difficult. We must insure uninterrupted operations in the mines and the delivery of supplies to all customers, in addition grant deserved leave to a greater percentage of workers, carry out a general overhaul of technological units at a time when good weather tempts the miners to be in the open rather than have to work overtime on Saturday, which is voluntary. We are preparing measures for the winter already now based on experiences, suggestions but also tasks which were assigned to us at the conference of general managers by Prime Minister Comrade L. Strougal and by our minister.

[Povolny] I can but confirm that the degree of preparedness of vital operations in the OKR is very good be it in coal preparation, air supply or transportation of coking coal for our metallurgical enterprises. We appreciate that the Ostrava-Karvina, Kladno and later also the Sokolov basins were of substantive help in solving the calamitous situation at the beginning of this year. In the OKR great attention was paid to preparing for the winter be it in checking installations vital for mining operations or in physical inspections with the participation of party and trade union workers and the economic management.

Return to Pneumatic Picks?

[Question] The government resolution No 145/1977 calls for improved exploitation of coal deposits in your basin. What is the thrust of this government resolution and under what conditions can it be implemented?

[Otava] In the Seventh Five-Year Plan we are expected to raise the mining output from up to 139 cm thick seams from 24.6 to 34 percent, from unspecified deposits from 14 percent which we attained in 1977 to 17.8 percent and reduce surface losses by 20 percent compared with 1977-1978. Therefore, we are facing demanding and difficult tasks.

In order to implement these tasks the labor force must increase between 1980 and 1985 by 4,700 workers, financing of production in the amount of approximately half a billion crowns must be insured, the requirement for unbudgeted machinery must be raised by Kcs 600 million and the necessary catering, health and housing facilities must be provided. Above all, we need people because in these mine shafts mechanization is not feasible and we must offer people material incentives to induce them to return to the old classical method of mining which was customary in our country 25 years ago. And in the meantime we must make parallel use of science so we can uncover working faces without the need of people, find an alternative solution for mining this coal suitable for coking by other technological procedures which would guarantee success. The Geological Institute, the Mining Office of the Commission for Classification of Supplies must participate in this project.

[Povolny] It is true, improved exploitation of coal deposits in the OKR requires focussing attention and pooling all forces and means not only by technicians and the scientific and research base in the basin but also by a whole series of other scientific, research and development organizations, the Federal Ministry of Fuels and Energy and especially the Mining Institute of the CSAV (Czechoslovak Academy of Sciences) which should take the initiative in approaching the solution of so complicated a task.

The mining of seams to a thickness of 1.4 meters or smaller is technologically very exacting from the viewpoint of mining geology and tectonics. In case of the necessity to return to the classical method of using pneumatic picks mining work would turn into physical labor which we do not want to see happen because of increased laboriousness and physical exertion. This is the reason for the need to solve the problem with the help of the scientific and research base.

We are aware--and this is also born out by the words of Comrade Otava--that this will be a very costly project but in view of the diminishing resources of our fuel and energy base this is a task on which we will have to concentrate much more intensively than hitherto because the rising world prices for oil and gas force us to use the coal substance much more efficiently and exploit our own raw material resources to better effect.

More workers will be required, as many as 5,000, which is a challenge for many okres national committees with sources for recruitment. There the comrades must realize that they must send workers regularly to the OKR if they expect regular supplies of coal. And not just any workers but good workers, workers who will insure uninterrupted supply of coal for the domestic market.

#### Justified Exports

[Question] It is generally known that Czechoslovakia has no surplus of coal, that coal has long been imported nevertheless coal is being exported, specifically from the OKR. How can you explain that?

[Povolny] Yes, we do export coal and the reasons are: First, the balance of payments which requires from coal basins importing advanced machinery to pay for it at least partly by coal exports in hard currency.

The second reason: For example, we import coal for the Vojany power plant which is situated near the Soviet border from the Soviet Union instead of shipping coal across the whole length of the republic from North Bohemia which would further aggravate the already difficult transportation situation. And inversely, we export coal to states bordering in the north on the North Bohemia or Sokolov basin. Overall, it can be said that we export much less coal than we import especially from the USSR and Poland.

Other reasons for exporting coal are long-term contracts concluded in the past, especially at a time when there was no market for coal and when the so-called "Sik theory" counted on a substantial transition to the use of crude oil and gas.

Otherwise exports are going to capitalist countries where there is primarily a demand for coking coal. But we export it also to Romania and to the other socialist countries, for example to the GDR and Hungary.

The Dies are Cast

[Question] In conclusion: what is the outlook till the end of this year, till the end of the five-year plan, possibly also for the following one? What is in store for you and how are you going to solve all your problems?

[Otava] In spite of the problems and difficulties arising from worsened geological mining conditions, spontaneous fires, earth tremors and complicated mining conditions, especially in the Prvni Maj, Cs.Armady and Sverma mines, the prerequisites exist for fulfilling this year's targeted task of 24,500,000 tons and the volume of coal suitable for coking in the amount of 18,700,000 tons. I expect that the fulfillment of pledges, constant checking and evaluation of assigned tasks will be equally successful as in the first half of the year.

Of course, we are already now concentrating on the concluding stage of preparations for the last year of the Sixth Five-Year Plan. The problem of having to mine at great depths and the shortage of capacities caused by the exhaustion of old mines will aggravate further but we will, nevertheless, fulfill the assigned task diligently and uncompromisingly in cooperation with the entire collective of miners in the OKR.

We are already intensively, deeply and responsibly involved in the tasks of the Seventh Five-Year Plan. And it can be said that the problems arising from stabilizing the mining output at 24,500,000 tons are coming in sharper focus. Primarily because deposits in the Fucik, Rudy rijen, Sverma and Ostrava mines are being exhausted. Replacement capacities are not available fast enough and we are therefore forced to make up for the output of one medium-sized mine by overtime work on Saturdays.

The main problem in the Seventh Five-Year Plan will be capital construction which is very exacting mainly in the construction of new levels, in reconstructions and the establishment of new mines. This involves the mines Darkov, Staric and Paskov, the construction of coal washing facilities and the completion of necessary capacities for final coal purification and much fuller exploitation of crude coal mined by our miners. We consider the Seventh Five-Year Plan to be difficult but feasible if, after analyzing the tasks, we can implement them. There is no other way, conditions being what they are. The issue is to deliver the quantity of fuel which central authorities expect from us.

Our second large program is rationalization in power consumption needed for coal mining. The power requirements and the amounts involved are considerable; therefore, we are assigning this problem equal priority as that of fulfilling the state's Seventh Five-Year Plan. In other words: The dies are cast, the tasks are clear. It is up to us to fulfill them collectively and implement them in accordance with the resolutions of the 15th Congress.

[Povolny] The intensive activity of party, trade union and youth organizations is a guarantee that the 1979 tasks will be fulfilled and exceeded and that conditions will be created for the fulfillment of the plan for 1980. I concur with the statement made that the tasks of the Seventh Five-Year Plan, as they have been specified for the OKR, will be very exacting. But this is true of every segment of our national economy and especially of the fuel and energy base.

I am convinced that if socialist pledging maintains its high rate of effectiveness and party, trade union and youth workers do not weaken in their activities but intensify them then the preparation of the Seventh Five-Year Plan will be detailed and thoroughly discussed with the people which will guarantee that the OKR will continue to be one of the pillars of our fuel and energy base. This will require the active help from the other interested ministries and their economic production units be they, for example, the CKD Prague, CKD Slany and a whole series of other suppliers.

#### Brown Coal Mining Urged

Prague SVET HOSPODARSTVI in Czech 23 Aug 79 pp 1,2

[Text] The North Bohemia kraj has acquired great importance in fulfilling the overall objectives of our economic and social development. Even though it accounts for only 6 percent of the CSSR territory it produces 35 percent of the total electric power and mines about three-fourths of our brown coal. This is very important today when fuels and power have become so precious the world over. This is also why North Bohemia and especially the sites where mines are being developed and electric power produced are rightfully accorded priority in the continued development of the CSSR.



The 15th party congress confirmed the importance of North Bohemia for the national economy by directing that attention concentrate here on coal mining and its transportation, on power production, the development of the chemical industry, the uranium industry and heavy engineering. At the same time the Congress laid down guidelines for improving living and working conditions of the North Bohemia population including tasks which must be implemented to achieve stabilization of the labor force and create labor resources needed to fulfill vital developmental objectives.

The fuel and power situation developing in world markets induced also the CSSR to accelerate the mining of coal. Additional requirements had to be added to the already very exacting requirements of the Sixth Five-Year Plan out of necessity. And since the North Bohemia brown coal basin is the only domestic source which can supply additional fuel it has become the main focus for the needed increase of domestic primary sources of energy.

This economic necessity is manifested by marked changes in the current plans for the North Bohemia area: the mining progress on coal faces is being accelerated, new mines are being opened, new replacement facilities are being built for facilities and installations which will have to be razed so the sites they are located on can be freed for new mine development. A prime example is the accelerated disappearance of the old city of Most and the construction of a new city of the same name.

In the beginning of May of this year the translocated two track railroad line connecting the city of Most with Chomutov has been opened for traffic. The line passes through the so-called engineering installations corridor at Most. The reason for translocating the line was to gain access to coal deposits and at the same time increase the size of the railroad station at Most to accelerate transportation of brown coal from the North Bohemia basin. This is another step indispensable for developing our principal fuel and energy base.

The Most Corridor represents a large capital investment of three-quarter billion crowns. It is remarkable engineering and rather complicated construction project which encompasses the railroad line, a highway, an urban rapid transit line, engineering networks and also the new bed of the Bilina River. The channelling of these "arteries" into a single right of way on already mined out territory permits continued mining of the badly needed coal.

It is obvious that establishing coal mining securely in the North Bohemia kraj is not going to be simple and therefore the pulling of forces from all of Czechoslovakia has to continue--just as the North Bohemia coal and power render valuable services on the entire territory of the republic. This is confirmed, for example, by the rise in output of the brown coal mined from 28 million tons in 1955 to 67 million tons last year or by almost 2 1/2 times.

Increased volume of coal mining places more exacting demands on transportation capacity and on securing access of the transportation network to progressing coal mining fronts and on meeting the needs of production and life in the kraj. In this context the most corridor is only one example of the scope of the tasks which are being solved. The translocation and the new rights of way of railroads, highways and engineering networks require changing river beds and streams, tearing down communities and building new housing. This places heavy responsibilities on the political and organizational work of the North Bohemia party and state organs.

The increasing coal mining requirements encounter some objective obstacles such as more difficult coal deposit conditions and thereby also the need of surface mining to descend to depths exceeding 150 meters. These changed conditions require a great effort from workers, place stringent demands on technology and transportation in removing overburden.

The importance of developing the North Bohemia base requires in addition to fulfilling the material tasks also the adoption of corresponding measures in the sphere of management. It became clear that balanced fulfillment of tasks in North Bohemia depended not only on efficiency and quality of work attained there, however important they may be for the final result. The successful performance by miners, power engineers and other workers in the kraj likewise plays an important role. It is primarily the heavy engineering industry which cannot be absolved of the responsibility for the quality and output of mining machinery, the standard of construction and assembly work involved and the uninterrupted supply of spare parts, the necessary equipment etc.

An inquiry into the causes of problems of fulfilling capital construction in the North Bohemia kraj reveals that mastering the construction projects depends primarily on an increase of construction capacities in the kraj. Of equal urgency, however, is high quality work by investors, and the omnilateral balanced preparation of the planned projects. Close productive cooperation by investors, designers and construction suppliers is indispensable.

Of prime importance in all undertakings is the personal responsibility of managers for individual projects, for meeting set deadlines and mainly for the quality of the work. Building construction organizations are responsible for implementing structural changes and meeting planned construction rates primarily with respect to service facilities, engineering, transportation and water supply facilities.

Centralized management of some especially important construction projects (such as, for example, the replacement of the water reservoir for the abolished Drnov Reservoir, relocation of the railways, building special tracks for the transport of panels etc.) is working out well in coordinating preparations for construction work and meeting deadlines for handing over completed projects. But the broad scope of tasks and the urgency of their uninterrupted and timely completion in the interest of the entire Czechoslovak economy requires the transfer of additional specialized construction capacities to North Bohemia.

But the end of building complicated construction projects in the North Bohemia kraj is not in sight. In recent years work has begun on the right of way of the Ervenice corridor which skirts the location of the exhausted mines Velkolm Ceskoslovenske Armandy and Jan Sverma. By next year railway tracks and the highway bed, engineering networks and the next section of the Bilina River should be relocated to free the sites where coal mining is to continue. Experience has demonstrated that making progress in operations requires well thought out preparations and strict adherence to adopted harmonograms by all participating partners.

To assume that developing the fuel and energy base in this area involves only construction projects connected directly with coal mining would be to oversimplify matters. The construction of housing and of service facilities to maintain a livable environment in this area is equally important.

Fulfilling the housing construction program is indispensable for the current and future need to stabilize population in the North Bohemia kraj. At the same time necessary service facilities, schools, businesses, health and sport installations etc. must be provided.

In some locations of the North Bohemia kraj the environmental problem is serious. Besides successes, achieved for example in the construction of district heating systems and the control of particulate emissions, the frequent breakdown of fly ash separators, which are not yet being properly maintained, is disquieting. The benefits of expensive installations which were erected in the past in adequate numbers to improve air quality are thus lost. The situation must be corrected quickly by improving repairs and supplying spare parts for the separators, filters etc.

An unresolved problem--everywhere in the world--is the control of sulfur dioxide emissions from thermal power plants. The currently used measures brought, in spite of their high cost, no improvement and here the solution will be the installation of efficient desulfurizing installations able to control the emissions from our large power plants burning coal with a rather high sulfur content. To solve the problem we are currently cooperating with Soviet specialists and studying the application of the so-called magnesite method.

The fight for clean air is also closely connected with other environmental aspects. Recultivation of spoil banks and areas degraded by mining must be intensified and the ecological balance of the region must be restored. Of great importance here is citizen initiative and volunteer brigades organized by national committees to improve the esthetic aspect of settlements and work sites. But investors carry in this respect considerable responsibility because they frequently neglect to landscape building sites after completing construction projects even though it is their obligation.

The development of the North Bohemia kraj is a highly topical exacting, and urgent task which is regularly on the agenda of the highest party and economic authorities. A CSSR and CSR government commission was appointed to solve the problems as they arise, supervise the implementation of the adopted plans and assist in their timely completion.

The tasks cannot be expected to solve themselves automatically. Much work, great effort and initiative will still be needed to convert societally justified plans into deeds for the benefit of our entire economy.

#### Deliveries Lag in Slovakia

Bratislava PRAVDA in Slovak 4 Sep 79 pp 1, 2

[Article by PRAVDA Editor Dusan Stancek]

[Text] Bratislava--Last week Slovak power engineers were again faced with a rise in power consumption. Summer is gone for good and even though the sun still makes the thermometer rise these days plants and enterprises are beginning to resume full production after the vacations.

Last week Slovak power plants produced 192,455 MWh power. Of this steam and thermal power plants produced in excess of 130,000 MWh. The first V-1 unit of the nuclear power plant at Jaslovske Bohunice contributed in excess of 43,000 MWh to this total; according to plan this power plant closed down for inspection and maintenance on Saturday. From the start of operations till the end of August the unit produced 1,464 billion kWh power which is considerably above the figure in the annual plan. Thanks to the on the whole smooth operation of the nuclear power plant and the adjustment of the plant closing period the power engineers produced in August 177,000 MWh power in excess of the monthly plan.

The general overhaul of unit 4 at Vojany started in the beginning of last week. According to informations received from Eng Ludovit Slepecky, chief of the maintenance department of the General Management of Slovak Power Enterprises at Bratislava the initial dismantling work, opening of brickwork and cleaning of equipment is so far proceeding according to the harmonogram. But they have difficulties with the assembly of the slag removing equipment. It is a pity that the Power Plant Construction Enterprises in Prague have recalled their workers from the building site. Similarly, the First Engineering Works at Brno have announced a delay in the delivery of equipment for fuel pulverizers. Delivery can reportedly not be made until in October while the power engineers must get the deliveries by the middle of September.

At Vojany repairs on unit No 26 are being completed today. The unit is already full operation, the Vojany power engineers have succeeded in completing repairs 3 days ahead of time as in the preceding repairs. The current state of repairs of the next unit No 6 promises to be completed by all persons involved within the deadline.



While a certain improvement in the water level in the reservoir of hydroelectric power plants was noted last week the situation has again worsened in the 35th week. The Orava dam is already short of 10 million cubic meters of water, the river Vah has a low water level over the entire stretch used for power production.

Coal delivery is again short by 10,402 tons--this is the unfavorable coal delivery balance of the concern Coal and Lignite Mines at Prievidza to the Novaky power plant last week. The power plant coal pile which is supposed to hold 120,000 tons by the end of September now holds 74,000 tons of coal. These days combustion tests are being conducted at Novaky with lignite mined at the South Moravia mines at Hodonin. Should the tests be successful the power engineers will transport 40,000 tons of lignite from Hodonin till the end of the year. This is one way of solving a tight supply situation because coal deliveries from the North Bohemia basin will decline in the last quarter due to overloaded rail transportation from the fall harvest.

Assembly work on the 400 kV transformer at Podunajske Biskupice, which supplies Bratislava with power, proceeded successfully last week. CKD Praha employees completed the assembly of the transformer which will be tested and go into operation by the end of the week. It appears that the repairs will be completed one day ahead of the original schedule. In this way power engineers will have secured a more reliable supply of power to Bratislava.

8664

CSO: 2400

GROWING DIFFICULTIES SEEN IN ACQUISITION OF WEST GERMAN MARKS

Frankfurt/Main FRANKFURTER ALLGEMEINE in German 8 Sep 79 p 4

[Article by Hugo Mueller-Vogg, datelined Leipzig, 7 September: "'Socialism Guarantees Life, Intershop Guarantees Quality of Life'--Luxury Food Market in GDR Is Worth a Leipzig Fair"]

[Text] "Socialism guarantees life, the Intershop guarantees quality of life," mocks the "Academixer," the student cabaret of Karl Marx University in Leipzig. Nevertheless the people are asking themselves how long this guarantee will still be valid. Since the government in East Berlin in the early summer of this year made the purchase of Western consumer goods more difficult by ruling that GDR citizens are no longer permitted to pay in cash but instead must exchange their Western currency in advance for "forum checks," the route to the Intershops has become "only" more circuitous. But no one knows if the acquisition of checks will not one day be coupled with the requirement to provide an accounting concerning the source of the valuta marks. The FRG marks, the secret reserve protection of many middle-class German craftsmen, merchants and illegal workers would thereby be greatly decreased in value.

These are still only fears which could, at the earliest, become reality when the last festival fanfares for the "30th Anniversary of the Founding of the GDR" have subsided at the end of the year. However, the check-selling hurdle has already had an effect on demand at the Intershop cash registers. At the Leipzig Fair, marketers of foodstuffs and luxury items from the FRG are saying that spontaneous purchases in these shops have decreased. Earlier, GDR citizens would have dashed into the Intershop to buy cigarettes, liquor or candies. Today the trip to the currency shops is planned more carefully because of the detour which must be made to a branch of the state bank since the checks can only be obtained in the kreis and bezirk cities. It has also been observed that the person who has to plan the timing of his purchase so exactly is also putting his shopping list together more carefully, is doing without culinary delights and using his valuable Western money to buy high-grade textiles, household appliances or electronic items for home entertainment.

According to the mid-range assessment of experts in intra-German trade, it is not only on a move toward non-food items that must be expected in the variety of goods offered in the Intershops. Pessimistic suppliers in the FRG also expect that private citizens in the GDR will have fewer West German marks at their disposal in the 1980's and 1990's. This prediction is based on the growing apart of the two parts of Germany. Thirty years after the division, the relative ties are become increasingly weaker as are the sources of West German money. On the other hand, optimists point to the large number of personal ties which are developing from the many economic, athletic and cultural contacts.

But superimposed on the perhaps decreasing significance of the Intershops is another development: the expansion of the specialty shops in which Western foodstuffs and consumer goods, as well as best quality East bloc merchandise, can be purchased at astronomical prices but for German Issuing Bank marks. Thus, 725 million GDR marks worth of foodstuffs were sold last year in the specialty shops while in the Intershop area (which includes non-food items), 700 million GDR marks were spent. In the judgment of the Central Marketing Company (CMA), the GDR is, therefore, a "significant market" for the agricultural and food industry. This long-range significance reflects not only an increase in deliveries from the FRG (1978--8 percent increase) but also the show window function of the Leipzig Fair and the GDR market for the entire East bloc. In Leipzig, the foreign trade organizations of the Eastern European countries first view what is available before they try to set the bureaucracy at home in motion. Moreover, if a supplier from the FRG can point to success in the GDR, it is interpreted as a sign of quality in Poland or Czechoslovakia.

So it is obvious that the FRG exhibitors in Leipzig are not only in a contest with the strong Western European competition but also with each other. What all is being done to please the host GDR and its foreign trade functionaries can be seen by looking at the fall edition of the "Fair Magazine International." In the pictorial magazine, FRG luxury food suppliers, especially the FRG branches of international companies, are particularly heavy advertisers. Two companies have already "normalized" their trade relations so far that in an advertisement (price of one page more than 20,000 FRG marks) on the occasion of the Leipzig Fair they even congratulate the GDR on the 30th anniversary of its birth. In East Berlin and Leipzig one might have been as pleased about the "birthday-chocolate kiss" from Frankfurt as the political congratulatory address of the Westphalian manufacturer Storck, even more than about the foreign currency income connected with it.

9241  
CSO: 2300

PRODUCTION, DELIVERY OF RAILWAY VEHICLES DETAILED

East Berlin AW DDR-AUSSENWIRTSCHAFT in German Vol 7 No 37, 12 Sep 79 p 10

['AW Market Information' report by Information and Public Relations Department, GDR Ministry for Foreign Trade: "High Performance Capability of GDR Railway Vehicle Production"]

[Text] In the time of its existence, the GDR railway vehicle industrial branch has developed into one of the internationally important producers of railroad rolling stock and equipment for it. Products of this industry are in use in 36 countries today, and this figure alone convincingly reveals the performance capability of railway vehicle production in our country.

The GDR freight car industry is united in the Railway Vehicle Production Combine VEB. This combine includes 15 state freight car building enterprises. The main enterprise in the combine is the enterprise for development, testing and rationalization. The scientific-technical potential of the industrial branch is concentrated here and is used for the systematic development of high-quality products. At the same time, it is the goal of its roughly 700 employees to develop every productive processes in the shortest possible time and to put them into production. Extensive installations for testing are available in the test shops and laboratories.

The following are among the end producers in the combine:

- The Ammendorf freight car building VEB (long-distance passenger cars with different kinds of equipment, long-distance dining cars, trucks);
- The Dessau freight car building VEB (four-axle mechanically refrigerated cars, five-car refrigerated trains for 1,520 mm gauge, two- and four-axle ice-cooling cars);
- The Bautzen freight car building VEB (railway excursion cars for international travel);
- The Niesky freight car building VEB (special freight cars);
- The Altenburg freight car building VEB (two-axle and four-axle special freight cars).



Subcontracting enterprises within the industry are the Berlin brake works VEB, the Berlin vehicle equipment VEB, the Ilseburg wheel set factory VEB, the Stassfurt journal box factory VEB, the Zittau spring works VEB, the Vetschau freight car equipment works VEB, the Bad Schandau vehicle seat works VEB, the Muehlhausen mining cars and fittings works VEB, and the Schmoelln special devices VEB.

By specializing the production program of the enterprises it was possible to produce large series among the various types of vehicles. Some export figures attest to this. For example, about 51,000 freight cars were delivered to the USSR alone, 5,800 to the CSSR, 3,200 to the Polish People's Republic, and 2,200 to the Hungarian People's Republic. Several thousand cars were delivered to Arab states, mainly Iraq.

The freight car building enterprises in the combine specialize in manufacturing railway excursion cars; they build about 1,200 railway excursion cars annually, which, for the most part, are exported. Within the framework of CEMA, the GDR specializes, among other things, on several types of railway excursion cars and meets a substantial part of the respective requirements of the partner countries. Beyond that, there are exports to numerous countries in Europe, Asia and Africa.

#### Oriented Toward Scientific-Technical Progress

With the production of almost 18,000 long-distance vehicles for the USSR, the Annendorf freight car building VEB is in a position to tout a unique accomplishment in the export of railway vehicles. The Annendorf products attest to the scientific-technical progress in railway vehicle production by virtue of their proven design, modern construction groups and functional interior appointments. They also play a role in establishing the international level of these types through their high utility values, such as maximum speed of 160 km/h, ranges of use in climatic zones between +50°C and -50°C, long-term guarantees for protection against decay and corrosion and the use of standardized components.

The development of new energy supply systems is part of the overall group of tasks which are being jointly solved by the Annendorf freight car building VEB and Soviet institutes and freight car building works. Thus, a development from the Physical-Energetics Institute of the Academy of Sciences in the Latvian SSR in Riga was developed further by GDR specialists; it is a 75-kW converter. The reliability of the new design was demonstrated by tests on routes in the GDR and the Soviet Union.

On the basis of this 75-kW converter Soviet enterprises are now busy with the production of a 30-kW converter. The GDR in turn will build a 10-kW converter so that a line of centralized energy supply systems will be available for the entire stock of long-distance railway excursion cars.

Development of autonomous energy supply systems is also being pushed forward; these will be used in long-distance railway excursion cars on

nonelectrified routes. For example, the GDR built the new 32-kW system with a three-phase motor and electronic control, while the USSR is providing the EW 10 switching system. The long-distance dining car, which was presented for the first time at the 1979 Leipzig Spring Fair, is equipped with the new static power converter (75 kW output).

#### Varied and Reliable

The Bautzen freight car building VEB and the Goerlitz freight car building VEB are building railway excursion cars primarily for 1,435 mm gauge, but also for various narrow gauges. They are being produced as coach cars (first and second class), both as cars with compartments and as high-capacity cars, dining cars and buffet cars, sleeping cars, couchette cars, baggage cars, double deck coach cars for short distance and city express traffic and special cars for the most diverse requirements.

The largest part of the railway excursion cars for 1,435 mm gauge is in line with the specifications of the International Railroad Union (UIC). The vehicles can be used on the lines of RIC (International Passenger and Baggage Car Union) member railroads. However, at the customer's request, numerous types are also being manufactured which deviate considerably from the previously mentioned standard types in respect to gauge, general limitations, layout, interior furnishings and technical equipment. In general, a high percentage of standardized components is being used. On the one hand, this guarantees the operator high quality, and, on the other hand, is, of course, very important for maintenance.

The majority of the railway excursion cars are equipped with trucks of the Goerlitz V type; these excel by virtue of their simple and solid construction and are suitable for speeds up to a maximum of 140-160 km/h. In cooperation with the CSSR, a new railway excursion car truck for maximum moving speeds was developed by GDR railway vehicle production; it is in line with international trends of development. Designated as GP 200 it was successfully tested at speeds up to 200 km/h and is at present in pilot group production. The higher technical outlay in the GP 200 truck, in contrast to the Goerlitz V type of construction, is apparent among other things in the very efficient brake equipment which consists of disc brakes, shoe brakes and electromagnetic shoe brakes.

The following are examples of successful series of GDR railway excursion cars: the type Y unit-railway excursion car, the standard type in national and international traffic; the high-capacity second class coach for Egypt's railroads; the air conditioned tourist cars for the Iraqi state railroad, the dining cars for the Czech state railroad, the RIC sleeping car for international traffic; the couchette car for the Hungarian state railroad.

One of the most recent developments in GDR railway vehicle production is the 26.4 m-long type Z 2 railway excursion car which has yet to undergo endurance testing by the GDR railroad. The prototype of a 26.4 m-long sleeping car with air conditioning which is in keeping with the most recent UIC specifications, is to be completed before the year is out.

The tradition of many years of double deck cars should be emphasized. The line of development at the Goerlitz freight car building VEB was from two- and four-part double deck units and the five-part double deck arrangement to the present double deck standard car. GDR railway vehicle production, with the production and export of several thousand double deck cars, achieved a unique accomplishment in the world in this sector.

#### Proven Value in All Climatic Zones

In accordance with the CEMA agreement on specialization, the Dessau freight car building VEB is one of the largest producers of cooling vehicles; to date, customers in 11 countries have put into service the ice-cooling cars from this enterprise, as well as individually cooled mechanically refrigerated cars and five-car refrigerated trains. The vehicles do an equally good job of handling perishable cargo in a Siberian snowstorm as in transport in blinding heat through the desert region of Central Asia or the Middle East. Depending on the type, cargo space temperatures of  $+14^{\circ}\text{C}$  to a maximum of  $-30^{\circ}\text{C}$  are achieved in the mechanically refrigerated cars.

Construction using large sections and supports in some of these types effected the changeover from classical steel frame construction to plastic-metal-composite construction, whereby the utility values of the cooling vehicles rose substantially. Optimal light construction and many advantages in receipt and maintenance make these "sandwich vehicles" a desirable export item. The five-car refrigerated train ZB 5 SU is one of the proven series products. A further development of the proven MK 4 19 m is the mechanically refrigerated car MK 4-424-79. The Dessau freight car building VEB delivered the 5,000th car of this series to the USSR during the GDR's anniversary year.

The Niesky freight car building VEB developed into an internationally-respected producer of freight and special freight cars. Its performance capability is apparent, among other things, from the fact that in the past 10 years alone 42 new and further developments were put into production.

The enterprise's manufacturing program includes open and closed freight cars, stanchion cars, flatcars and special cars for iron and steel works, the chemical industry and other industrial branches. In addition, trucks of different types are also manufactured to meet the requirements of other railway vehicle manufacturers and various subcontracted and replacement parts are produced in large quantities. In addition to the USSR and the other socialist countries, customers include, among other, Sweden, Switzerland, Austria, Greece, the FRG, Iraq, Syria, Egypt, Algeria and the United States.

The vehicles developed and built in the past few years include, for example, covered freight cars (for mass transport of traditional goods, in two- and four-axle design) made of wood or sheet metal and also in narrow gauge size for banana plantations in South America and open freight cars

(four-axle) in wood and sheet metal. The 2 x 2-axle double deck car unit, which is especially suitable for rail transport of road vehicles, is highly regarded. Stanchion cars and flatcars are built in Niesky in two-, four- and six-axle versions, as track section transport cars, container cars and carrier cars for heavy and extremely heavy general cargo; they were also developed as a close-coupled unit, primarily for transporting light and bulky goods on transit routes through several countries (including ferry traffic).

Special vehicles are destined for various applications, for example, for the iron and steel industry, brakecrew cars (for Iraq) and well cars (for Sweden).

In regard to the very extensive program of the subcontracting industry of GDR railway vehicle production, mention should be made of such products as brake equipment, springs, and wheel sets. The increasingly greater use of electric and electronic components is very important for these enterprises.

#### Quality in the Forefront

Products of GDR railway vehicle production were awarded many honors for high utility values; 25 gold medals at Leipzig fairs are an example of this.

The fact that in honor of the 30th anniversary of the GDR 20 new and further developed final products are being put into production, more than 40 percent of all goods production, is proof of the tremendous efforts of the approximately 23,000 workers in this industrial branch. Some 11 of these have the highest quality label, for example, the five-car refrigerated train for the USSR, the double deck standard car for the GDR railroad and a freight car for export to the nonsocialist economic area.

At present a total of 46 percent of goods produced, that are subject to mandatory testing, are being delivered carrying the highest quality label, and this percentage will continue to grow. All enterprises in the combine are vying for the title "enterprise of distinguished quality work," which they have already earned several times.

Such high performances depend on collective cooperation, the constant exchange of experiences with scientific-technical institutions at home and abroad and the extensive knowledge of international technical development trends. Of course, the findings of GDR railway vehicle production are also available to interested parties for licensing. Many have made use of them.

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## GERMAN DEMOCRATIC REPUBLIC

### WEST GERMAN EVALUATION OF STATUS OF GDR AGRICULTURE

Bonn DAS PARLAMENT in German Vol 29 No 37, 15 Sep 79 p 6

[Article by Horst Lambrecht: "Industrialized Agriculture--Key Problem: Labor Productivity"]

[Text] There is no domain in the GDR in which such fundamental changes in the tenure and property relationships of production and living conditions have taken place as in agriculture. It has been (and still is) subjected to a constant process of transformation; its character has changed completely several times. The most drastic turning points were brought about by land reform and the collectivization into agricultural producer cooperatives (LPGs). Land reform was undertaken for political reasons. Collectivization was prescribed by ideological considerations; its purpose was the creation of socialist conditions of production. After the conversion of the preponderant part of the cooperatively farmed areas to the socialist mode of production had been secured at the end of the 1960's, a third phase began. This was the phase, as Ulbricht announced at the Tenth Peasants' Congress, "of the development of an industrialized agriculture."

In contrast to many Western countries, the GDR has a long-term agrarian program. The final goal is agriculture which is based on socialist conditions of production and which utilizes industrial methods. This concept is based on the Marxist assumption that the large enterprise is everywhere and always superior to the small enterprise and thus is to be aspired to in the agricultural sector as well.

In comparison with the predominantly small-scale farm production methods in Western countries and with its own enterprise structure in the past, the GDR has made considerable progress in the direction of realizing the model of the socialized, industrialized large-scale enterprise called for by its agricultural policy.

## Crop Production

This is especially true of crop production. The distance that has been traversed can be made clear with the following figures: While in 1955 there were still more than 800,000 enterprises with an average agricultural area of 8 hectares in the GDR, crop production, which in the meantime has been completely separated from livestock production, was concentrated in 1,230 enterprises in 1979; they have an average size of 5,000 hectares and are predominantly combined in so-called special crop production LPGs. These special LPGs have developed from the cooperative crop production departments (KAPs); they were formed at the beginning of the 1970's through the separation of farming from the earlier LPG and managed on the basis of inter-farm cooperation. Finally they were made independent.

If the LPGs of the 1960's had to be differentiated on the basis of the degree of socialization of the means of production, the types of individual and social work, as well as the method of income distribution, they must now be distinguished on the basis of the production profile. Today there are special LPGs for livestock and crop production.

Today LPGs also differ from earlier ones by size; if the average farm size for all cooperatives in 1965 was still 360 hectares, it was more than 10 times greater 10 years later.

## Further Experiments

Whether the special LPGs will be the ultimate type of farm in the hitherto continuous process of transformation of GDR agriculture remains to be seen. It appears that at least in crop production this will not be the case. Thus, since the mid-1970's, experiments have been made with so-called agricultural-industrial associations (AIVs). In 1977 there were 10 AIVs; they cover an area of 30,000 to 40,000 hectares. Theoretically, less than 200 of such AIVs would be enough to manage the entire farming area of the GDR. As far as size is concerned, this corresponds approximately to the number of kreises and approximately also to the number of agro-chemical centers (ACZ). At the present time, there are about 250 of these. The ACZs are one of the intercooperative or inter-farm types of enterprise which are to fulfill special tasks in the domain of auxiliary production and the manufacture of by-products. The ACZs undertake for the agricultural enterprises (on a contractual basis) the fertilizing, crop protection, and to an increasing degree also the sowing, as well as transportation tasks for agriculture. Fertilizing and sowing are done to a large extent by means of airplanes ("agricultural aviation"),

Approximately 2,000 to 3,000 employees are working under centralized management in AIVs. In addition to specialized crop production enterprises, AIVs are comprised of agricultural engineering, kreis enterprises for land improvement cooperatives, and ACZs. Moreover, participation of industrial enterprises which process agricultural products is possible.

## Livestock Production

In the process of the industrialization of agriculture, more progress has been made in crop production than in livestock production since, in the latter case, conversion requires disproportionately greater investments (the construction of stables, mechanization of the work processes!). By 1980, 20 percent of the livestock production is scheduled to be concentrated in large-scale industrial installation. In other words, considerable time will elapse before the completion of the development of industrialized agriculture, and considerable investments will be required.

Livestock production at the present time takes place in the following four types of farms: the special LPG for livestock production, the interplant/intercooperative facilities (ZBE/ZGE), the state farm (VEA) for livestock production, and the industrial fattening combine (KIM). At present, about four-fifths of the livestock is being kept in the special LPG (in mid-1979, about 2,900) and the ZBE/ZGE. Here the enterprises with traditional production methods predominate, i.e., the keeping of livestock still takes place chiefly in the stables of former cooperatives or even in those of private farmers. From a purely organizational standpoint, the process of concentration is much farther advanced than finds expression in the production method: Concentrated in 3,570 enterprise operating units, livestock production had an average inventory of 1,500 large animal units.

The KIMs are state enterprises which are subordinate to the bezirk managements. There are 30 of these; they deal with the production of meat, but also poultry and eggs. Like the ZBE/ZGE they are large-scale installations producing on one or several levels; some have the character of model enterprises. Examples of such mammoth enterprises are:

- a fattening and breeding facility for bulls with 24,000 fattening places,
- a breeding and fattening facility for hogs with 80,000 animals,
- a fresh-egg combine which has almost 500,000 places for laying-hens and produces 120 million eggs,
- several dairy cattle facilities with 2,000 to 6,000 cows.

According to GDR conceptions, the development of industrialized agriculture means to adapt management, organization, and production to industry and ultimately to adopt the way of life of the people employed here. More specifically, this means concentration and specialization. Specialization not only by separating out certain production processes and lives, but also by making product groups independent, as well as individual manufacturing sections (production to stages) all the way to individual outputs in independent production places. Specialization thus means above all the disappearance of enterprises with a complete production program. The end goal

calls for production units of large dimensions that are capital-intensive, very highly specialized, i.e., highly divided in terms of work phases. Not the fusion of existing enterprises (e.g., the creation of huge LPGs), but the separating out and development of specialized enterprises, not the narrowing of inter-farm output exchange, but its multiplication constitute the path which GDR agriculture is to follow. A high degree of the division of labor on the basis of large enterprises is the aspiration. "Livestock from the assembly line," "agricultural factories" are the goal.

#### Results and Assessment

If one measures the successes of the agricultural policy of the GDR thus far, a differentiated picture emerges: The small-scale farm method of operation, which creates considerable structural problems, has long been overcome, and the product outputs, measured by international standards, have reached a high level. They rose considerably in spite of constant changes in organization and production technology: If one takes market production as the measure for outputs, the result is an average annual increase of nearly 4 percent since the mid 1950s. That corresponds almost to the increase in the output of West German agriculture.

In spite of the approximately equal development of product outputs, there exists a productivity lag by comparison with the agriculture of the FRG. In crop production it amounts to one-fourth; i.e. if one takes the average of all crop products, the yields produced per hectare of agricultural farm land in the GDR are 25 percent lower than in the FRG. The differences in yield are especially great in the case of hoed vegetables, smaller by contrast in the case of grain. The hectare yields for potatoes in the GDR in 1978 amounted to 187 quintals, in the FRG to 291 quintals. During the same year, 38.5 quintals of grain were harvested in the GDR, 44.8 quintals in the FRG.

In the case of livestock production--which is based on the animal inventories that are standardized--GDR agriculture shows a total lag of one-fifth by comparison with the FRG. Milk production per cow--with the butter fat content being equal--amounted to 3,714 liters in the GDR in 1977, compared to 4,521 liters in the FRG.

In spite of the smaller productivity, the production output per capita is considerably higher than in West Germany: Because of the very different population density in the two states, more foodstuffs are produced in the GDR on a per capita basis than in the FRG. In the case of the most important foodstuffs, the demand is fully covered from domestic production. In spite of the high degree of self-sufficiency, the increase of production output still occupies an important place.



With regard to grain and fruit, the GDR continues to depend on imports. Grain as well as protein feeds must be imported in order--as in the FRG--to secure the fodder basis for the high livestock population (livestock related to agricultural land in cultivation). Over two-thirds of the domestic grain are used for fodder in the GDR as it is.

### High Costs and Numbers of Employees

A negative item in the balance sheet of the agricultural policy of the GDR is, above all, the fact that the costs of production are apparently very high. This can be perceived from the necessary input of the production factors and the high product prices. In addition, the considerable subsidies made available in agriculture (tax remission for income produced cooperatively, income transfers for the support of work units, preferential interest rates, investment subsidies, and subventions for capital goods) must be interpreted in this direction.

Conspicuous is the high supply of GDR agriculture with labor: In spite of the not inconsiderable reduction, 11 percent of all employees in 1976 worked in this domain. In view of the large-scale enterprise structure, this proportion is unseemly high. Likewise the input of workers in 1975 of 12.0 fulltime workers (AK) per hectare in the GDR was higher than in the Federal Republic (9.0 AK) with its many small enterprises. In the West German enterprises of more than 50 hectares the input of workers in 1975 amounted to 3.7 AK.

In the final analysis, the high input of workers in agriculture is problematical because at the same time a great deal has been invested and thus there were indeed possibilities to replace workers by machines. Agriculture (including forests) has claimed more than 13 percent of all investments since 1960.

Certain is the fact that such a restructuring process requires enormous capital expenditures. Apparently, however, in spite of the considerable increase in capital funds or machinery, the GDR did not succeed in effecting corresponding savings in workers. Comparative figures for the FRG, for example, show that the number of workers in GDR agriculture was reduced more slowly than in West Germany; at the same time, the amount of capital in GDR agriculture grew substantially faster than in agriculture in the FRG.

The increase of labor productivity is surely one of the key problems. If the claim of superiority made for the agricultural model of the GDR is to become reality, the advantages of large-scale enterprise structure in the final analysis must be transformed into productivity advances. As long as this is not done in a convincing manner, a positive assessment of this model is not possible. On the other hand, the following is true: Although the outputs of GDR agriculture today still lag to a large extent behind the agriculture of the FRG, which to a large degree is based on the production of small farms, it is probably too early to speak of an unsuccessful experiment. For, after all, considerable means have been expended for agriculture in Western countries for quite some time without a solution of the structural problems even being in sight.

## PREPARATION OF 1980 ECONOMIC PLAN DISCUSSED

Budapest FIGYELO in Hungarian No 38, 19 Sep 79 p 3

[Article by Dr Akos Balassa: "Next Year's Plan Is in preparation"]

[Text] During the second half of last year the planning organs analyzed the people's economy situation and the successes and experiences of its development. They concluded that the external conditions of development turned out to be significantly less favorable than expected. Because of this, and also because of the insufficient effectiveness and certain disproportionateness of domestic economic activities, significant deviations from the development projected in the five-year plan arose.

In December 1978, the Central Committee of the Hungarian Socialist Workers Party determined that there was insufficient harmony between the chief economic policy goals established at the 11th Party Congress and economic direction, and within economic direction, in economic regulation. The level of economic work and its success in directing organs and enterprises was unsatisfactory. In addition to the changes in external conditions, this also contributed to the worsening of the national people economic equilibrium position in 1978.

While in 1976-77 the national income, approaching the planned level, increased by 11 percent in 2 years, domestic consumption, as planned, increased more slowly, by 7 percent, (on this basis, in 2 years exports increased by 22 percent and imports by 12 percent) in 1978 national income, chiefly because the increase in the proportion of financial expenditures, rose by only 4 percent while domestic consumption increased by 10 percent (exports by 1 percent, imports by 13 percent).

Within domestic consumption, the population's consumption increased more slowly than planned while stockpiling in 1978 increased by 25 percent. In this framework, in addition to the excessive investment levels, the accumulation of stores was rather high (in 1978, the volume of stocks increased by 8 percent).

The MSZMP KB considered it necessary that the improvement of the people's economy equilibrium position be implemented with one accord as the primary goal of our economic policy. The goals related to economic growth rate,

alteration of production structure, economic development and the standard of living had, and continue to have to be subordinated to this end. This decision took into consideration that under such circumstances it is unavoidable and even expedient to differentiate in incomes and situation, or rather, in the growth potentials of enterprises and trade unions, or rather, certain workers in the interest of motivating efficient activity.

#### Initial Successes

In line with this, the 1979 National Economic Plan projected that, in order to increase social income by 3-4 percent, qualitative, efficiency and structural changes of production must receive priority, in addition to moderation in the quantitative growth rate. Domestic consumption was not to exceed the 1978 level, and within this, the people's consumption is to increase moderately. Stockpiling (primarily store increases), however, is to significantly decrease. Exports should increase dynamically, imports only slightly. Within this, the exports in non-ruble accounting relations are to increase faster than average, imports are to decrease, and the passive balance of trade is to significantly decrease.

In order to lay the foundation for the above mentioned goals, the 1979 National Economic Plan contained wide ranging income regulations and economy organization measures. With full knowledge of the actual results of 1978, and the first quarter of 1979 development, and with consideration of the newest changes in foreign trade conditions, the government organs took newer measure to direct systematic economic development. In the given situation, the role of operational state decisions taken within the framework of continuous economic direction increased.

The experiences of the past 8 months indicate that, in general, the economic processes were appropriately altered in the direction specified by the plan. At the same time, several objective factors again adversely affected the people's economy unfavorably in 1979. The foreign trade exchange rates are again deteriorating considerably. The procurement possibilities for certain important products from CEMA countries are worse than anticipated. The weather caused significant production losses in agriculture. However, in addition to the objective difficulties, other plan activities, such as energy and materials thrift, the reduction of unessential staff, improvement in resource utilization, reduction of unprofitable exports and production, and the rapid conversion of capacities not appropriately exploited to production of profitably marketable goods--in a word, the increase of effectiveness is still not progressing appropriately. Thus, despite the significant improvement achieved, we cannot be satisfied with the accomplishments.

In the first 8 months of this year, the growth rate of industrial production was appropriate for the plan and the demand development, and was considerably less than that of last year. Exports increased considerably more rapidly than domestic sales. We can expect industrial production and sales, with the exception of those of the food industry, to turn out for the year generally in harmony with the plan. The development rate is not the same everywhere.

It is more rapid in enterprises which are vigorously increasing exports than in enterprises which adapt to changing conditions slowly and whose production is barely increasing, stagnating, or in some cases, decreasing. Construction industry production is increasing at a rate slightly exceeding the plan. In several areas, such as for example in certain important large investments, implementation activity is increased in renovation work, and the satisfaction of demand improved somewhat.

Chiefly because of reasons of nature, agricultural production will not reach the planned level, but will foreseeably turn out to be approximately the same as last year. Plant production (especially the production of cereal grains) will decrease, but animal raising is developing more favorably than planned.

Since agriculture's contribution will be considerably lower, national income will not foreseeably reach the planned level. The worsening of foreign trade exchange rates will cause 1 to 1.5 percent loss in national income.

Domestic consumption is remaining a few percent below last year's level and probably will not even reach the planned level. Because of the effect of price and income measures during the year, the population's consumption is increasing somewhat slower than the planned 2.5-3 percent. Since, however, savings are less than expected, the rate of increase approaching the planned level.

The value of investments decreased slightly in the first 8 months of the year. We can expect that, after 2 years of "overfulfillment", the level of investments will not be greater than planned, and, in real value, will not exceed last year's. In the first half year, the stockpile supply of the national economy decreased to a considerably greater degree than last year. In the second half year an increase can be expected, but this year's stockpiling will, foreseeably, still not be greater than planned.

Despite the domestic consumption decrease and the relatively small increase in national income, the possibility still arises, and is ensured by the organizational changes implemented in production and marketing, that for the whole year, just as in the first 8 months, exports will dynamically increase while imports hardly rise, or not exceed last year's level, as planned. Meanwhile, it is fortunate that the non-ruble relation exports are increasing more rapidly than usual, while imports are decreasing somewhat. This makes it possible for the passive balance of the merchandise trade in this relation to be considerably smaller than the 1978 balance. Unfortunately, because of the unfavorable changes in the economic situation already mentioned, the degree of improvement may foreseeably be somewhat less than calculated in the plan.

Thus, in economic development, the evolution of changes in a favorable direction has begun. There is still a need for active effort for the remainder of the year in order that the chief plan goals be reached or more



closely approximated. However, even if, foreseeably, the results of economic development for this year are positive, this can only be viewed as an initial success in the implementation of our economic policy, and within this, equilibrium goals. For the rest, also taking probably conditions into consideration, increased efforts, and in certain important areas, more far reaching and more effective changes will be necessary.

#### Probable Conditions in 1980

Together with the analysis of this year's probable economic development, the planning organs have begun drawing up the 1980 National Economic Plan. This work is functionally related to the preparation of the Sixth Five-Year Plan conception. As it was already determined at the beginning of this year, when the preliminary economic policy ideas of the Sixth Five-Year Plan were adopted, the period beginning with 1979 and lasting until the substantial rectification of the national economic equilibrium is achieved, constitutes an organic period, from an economic policy standpoint. From this starting point, the economic policy direction of the 1980 Plan is determined in essence by the December 1978 resolution of the MSZMP's Central Committee and the chief principles of the in-process conceptions of the Sixth Five-Year Plan.

The concrete goals of the year's plan, of course, must be adjusted to the evolving economic situation and to the internal and external conditions probably for the coming year. Thus the final form of the goals and tasks related to the 1980 economic development could not have yet emerged. However, on the basis of the results of the planning work thus far, the chief conceptions which may foreseeably be the foundation for shaping next year's national economic plan can be outlined.

Considering that in the area of economic balance improvement, significant but only initial results could be reached this year, and that the external economic conditions next year will not be better than they are this year--in fact, further sensitive deterioration of foreign trade exchange rates can be expected--the chief goal of the next year's plan will be the further improvement of the national economic balance. Consequently, in the growth rates of national income and domestic consumption, predominance must continue to be in favor of the former. Structural alteration of production and marketing, and on its basis considerably more rapid development of export than import will continue to be an important task for next year.

At the same time, 1980 will differ from this year. There are significant economic development factors which played a great role in the 1979 balance improvement, whose effect for next year will necessarily be less. Thus, for example, stockpiling this year is considerably less than last year. Next year, even if stockpile economics develops further, we cannot expect it to have a similar degree of improvement effect. There are some elements for which a more favorable situation can be expected. If we have normal

weather, agricultural production can be considerably larger than this year (although this year's production shortages will also affect next year's exports). We can also expect positive effects from several actions begun by our enterprises this year, the favorable effects of which will begin to be noticeable in our foreign trade balance in 1980.

The January 1, 1980 modification of production prices and other economic regulatory instruments are important new elements of next year's economic development. On its basis, the efficiency measure, which also expresses international value judgement in enterprise economic activities will be more predominant, and economic regulation will better motivate and constrain enterprises to energy and materials thrift, to better exploitation of the labor force and instruments and to alteration of production structure in the direction of increasing competitiveness. In this connection, it is very important that the completion of price adjustment and the finalization of our scale of economic regulations occur in such a way that in 1980 and consequent years the formation, distribution and redistribution of incomes be in very secure harmony with the equilibrium requirements of next year's plan, or rather, mid-range plan.

The strict regulation of incomes which can be utilized for domestic consumption absolutely cannot be relaxed. There will be stability in the standard of living. In stocking and public consumption, through conduct of a policy of strict thrift and sensible moderation, the population's consumption may increase at a modest, comparable to 1979's actually realized rate. Investments and stockpiling, however, may turn out to be the same as this year's level, or slightly below. Thus, in all likelihood, it may be possible to plan a slight increase in domestic consumption.

It also follows from this that to improve the national economic balance the maintenance of domestic consumption under strict controls will continue to have a very important and absolutely necessary role. The weight of this factor, however, will have a lesser role than this year in the continued improvement of the economic equilibrium. At the same time, the role of qualitative, efficiency and structural changes implementable in production must be vigorously developed in this process. The change in economic regulations is working in this direction, but is insufficient in itself. The necessary changes must result in concrete actions in state and enterprise directive work.

The increase in industrial production for next year can be at a rate similar to this year's or slightly higher. Construction industry production can increase to the same degree or less than this year. Agricultural production can increase "2 years' worth" in 1980, if the weather is average. We can expect considerable increase in plant production, and within this, this, incereal production. Thus, national income may be expected to increase at a somewhat more rapid rate than planned for 1980, but also more rapidly than planned for 1979.

This, however, is essentially not a "quickening" of the growth rate. In the interest of improving the economic balance, and within this, the slow increase of imports, it is invariably necessary to maintain the conception of moderated quantitative production increase. In addition to the modernization of products, to improving quality and to the dynamic growth of profitably marketable, competitive production, we must endeavor to more vigorously suppress unprofitable production, to be more thrifty with energy and materials and to better utilize the labor force and the instruments.

#### It Depends on Working Together

In addition to more motivating and more constraining regulation, through economic directive and organizational efforts it must be ensured that enterprises not conduct, even temporarily, passive, withdrawing, comfortable activities because of decrease or stagnation in domestic income, or because of other economic conditions becoming more difficult. In such cases, the realignment or transfer of capacities and labor force must be promoted by structural or, if necessary, organizational changes. These changes may also include regrouping to enterprises which are developing dynamically, or possibly making certain plants independent, or even closing down some.

With the changes implemented in production and marketing structure and the increase of production efficiency, the following goals should be concretely realized: domestic consumption should increase by at least 3 percentage point more slowly than national income, and that through the dynamic, considerably more rapid increase of exports over imports the further significant decrease of the people's economy import surplus be realized.

The elaboration of the 1980 National Economic Plan is in process, and the preparation of annual plans of enterprises and trade unions has also begun. The directing organs will orient the leaders of economic organizations about the planned development of the national economy and the changes in economic regulators in such a way that they promote the elaboration of realistic, well grounded enterprise plans which are in harmony with the chief goals of the national economic plan.

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# RESULTS OF MANPOWER REGULATING MEASURES EXAMINED

Budapest MAGYARORSZAG in Hungarian 30 Sep 79 p 32

[Article by Janos Rathonyi: "Payrollstop"]

[Text] "Work always expands to fill the time allotted for its completion... If the job's--especially office job's--time need is elastic then it is obvious that there is no connection between the job and the number of people called on to do it. The lack of real activity is not necessarily masked by a glaring display of loafing. The importance of a task and its complexity increases linearly with the time given for it..." Professor Parkinson's "Law" has become known to the Hungarian public exactly a decade and a half ago, when his combative and satirical book against the dragon of the bureaucracy and the cancerous spread of office apparatuses came out in Hungarian.

The pictures and examples given by the professor of historical, political, and economic sciences and well-known publicist, the Englishman Parkinson, could be seen in the administrative and company operations of almost every country after World War II. It was (and is) not different in our country, either: the experience of many years show that the number of workers in non-physical labor and especially in administration is irrationally high and it has well surpassed the increase in physical workers. In fact, at the beginning of the 1970's the growth was even stronger because the physical work force has actually shrunk and a tension developed in the labor force. The number of workers kept decreasing in several economic areas while the army of employees swelled threateningly: of the newly hired, every fourth employee swelled the administrative ranks.

## Freeze and Ban

The Council of Minister ordered an expected hiring freeze, effective 1 Jan 76. This was in effect for the managing organizations: ministries, councils, and trusts that manage companies could not hire at all. Companies and cooperatives could not hire anyone in the administration-management area. It brought results: it forced the companies and institutions to consider



their real manpower needs, to organize their work better, exercise thrift in labor force, and simplify the administration that was drowning in paper. On the other hand, the decree made the healthy and quality-raising employee mobility, the necessary manager turnover, and the young peoples' entry more difficult. Where, they had functioned well before the freeze there the pressing replacement of labor turnover caused problems but in other places where labor reserves were plentiful, the decree was easily implemented.

Therefore, another Council of Ministers decree replaced the hiring freeze on 1 Jan 77 with a ban on numerical increase in personnel. According to the decree, the companies and cooperatives could not exceed the number of workers they had in administrative-management positions on 31 Dec 76. Directing, managing, guiding organizations have to shrink their 31 Dec 75 personnel by 5 percent by the end of 1980. Other institutions had their management positions frozen passed on their 31 Dec 76 situation. The decree also regulated the wages that can be paid each year to those who work only part-time as employees or as contractors, such as pensioners.

#### Playing With the Status

The modified freeze was a more flexible solution in the reducing management worker rolls and in braking the inordinate swelling of administrative workers. It provided an opportunity to replace workers inside and ended the earlier, bureaucratic handling of quality changes (promotions).

The ministries report that the upward curve has stopped and in recent years, has started coming downward. The number of financial and accounting workers grew by 2.0-2.5 percent in 1974/75, but it shrank by 3.3 percent in 1976, 2.6 percent in 1977, and 0.8 percent in 1978. This meant a 7,000 person drop in 1976 and a 5,400-worker drop in 1977. The number workers in the ministries, directing organs, and councils dropped from 55,000 to 53,000. The ban, however, did not affect the technical jobs within the non-physical category.

(Eva Vince, an executive in the Ministry of Labor, writes in a review of the decree's effectiveness in MUNKAUGYI SZEMLE that 204 companies and cooperatives and 254 enterprises under ministries were sampled for implementation of the decree. They found, among other matters, that some enterprises managed to organize the paperwork more effectively, simplified administration, and introduced machine processing. Others, however, attempted to bring the 31 Dec 76 status to an ever higher level. They recalled some of the women who were on child-care leave. The documented labor force was, therefore, higher than the actual number at the moment of the freeze. In some instances illegal classifications and mistakes that resulted from a faulty interpretation of the job descriptions were uncovered.)

A few examples of mistakes, faults, and illegal acts: A unit of the Nograd Coal Mines placed three telephone operators into the permanent staff. The Budapest Writing Instrument Cooperative did not include its 6 warehouse

employees into the administrative group. The Borsod Coal Mining Company showed a higher than actual roll by verbally recalling its 43 of its workers on child-care leave in December 76 but allowing them to continue their leave in Jan 1977. The Szarospatak Clothing Cooperative included its three warehouse workers, one cashier, and a vice-president into the permanent group and thus reported five more workers at the time of the effect of the freeze. There were 18 people on the roll of the Debrecen Photo Cooperative who actually work for KISZOV.

The report lists a few other cases of "hiding", deliberate cheating, or faulty interpretation but also listed the effective moves on the part of the companies that led to the modernization of management and administration and a reduction of manpower. The Capital Baking Company solved the same repeated routine tasks by internal norm-making thereby saved 10 people. The Ganz-MAVAG organized a central pool for the better utilization of typists. The Budapest units of the Centrum Department Stores introduced central payroll and health insurance management by introducing forms that can be machine-processed. The Borsod Coal Mining Company last year experimented with uneven work schedule: this work-time shift allowed the same work to be done with less labor force.

The directing organs gave permission to raise the frozen job categories only in very well-justified cases. In one year, the ministries agreed to 487 and the councils to 765 such increases on the part of their enterprises. This is a small number, when we compare it to the 200,000 frozen jobs. Even with the permitted exceptions, the administrative-management jobs keep shrinking. The permits are in relation to capacity increases (30-35 percent of the permits), significant changes in the production structure, re-organization (10-20 percent of the permits), and new services for the population. Exceptions are even less in the central directing organs and councils; they were allowed to increase their administrative staff by only 326 people.

#### In the Interest of New Careerists

The labor-regulating decree made a point not to obstruct the placement of young people trained in administration and economics. And, since the decree permits replacement in cases of death, retirement, or resignation (the natural attrition) in the blocked job categories, there was no obstacle to the placing of young people. The high-school graduates also found jobs although the decree urged many of them to continue their studies in apprentice schools so they would choose physical work rather than an office work.

The cutting off the dragon heads of the sprawling bureaucracy is not the only way, however, to end unemployment /underemployment/ within the company's gates. There are still significant reserves in every area, both in physical and intellectual jobs. The better use of working time, a thriftier management of material and labor and the better organization of work still requires many internal decisions at the companies.

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STATUS, DEVELOPMENT OF PHARMACEUTICAL INDUSTRY ANALYZED

Budapest IPARI ES EPITOIPARI STATISZTIKAI ERTESITO in Hungarian No 7, 1979  
p 249-259

[Article by Ibolya Friedman: "Status of the Hungarian Pharmaceutical Industry and Main Trends of Its Development"]

[Text] In our country, pharmaceutical production has traditions dating back to the past century. The first Hungarian pharmaceutical enterprise of an industrial-manufacturing character is associated with the year 1847 and the name of Daniel Wagner. There has been an increase in the rate of development of the branch during the first quarter of the 20th century hallmarked by names such as Gedeon Richter, Wander and Partner, and the Kabai Brothers.

Having considerable intellectual capacities, the Hungarian pharmaceutical industry achieved considerable successes already during the period between the two world wars. These also became significant on an international scale during the years after the liberation. Currently the pharmaceutical industry is one of the fastest growing branches of our industry.

The international impact of the domestic pharmaceutical industry is characterized by the fact that it manufactures 1.5 to 2 percent of the global pharmaceutical production. Based on the volume of its pharmaceutical production, it is ranked 14 to 16th; based on export, it is ranked 6 to 8th among the countries.

The pharmaceutical industry fulfills an extremely important role: in the public health and social context, by supplying the population with pharmaceuticals; in the technological and scientific area, by its large volume of export. Therefore it is not an overstatement that the further development of our pharmaceutical industry is an important task also from the national economic standpoint.

Within the limits of the available space, my article encompasses the most dynamic "historical" phase of the pharmaceutical industry, the years between 1970 and 1977. I have attempted to reveal the principal results and

significant problems of the period between 1970 and 1977 illustrating the possibilities of further development in some instances as much as possible. In addition to examining production increase and the more important factors influencing it, I consider to be the central problem of this analysis the exposition of specialization trends in the pharmaceutical industry which are either feasible or are being currently realized, and also the varied pace and characteristics of the make-up of production.

#### 1. Changes in Production and Its Principal Factors

Between 1970 and 1977 the production increase in the pharmaceutical industry has considerably exceeded the development of other industrial branches, in accordance with the trends experienced in previous decades. The pharmaceutical companies have increased their production by 139.9 percent between 1970 and 1977 with an average annual expansion of 13.3 percent in production volume. (At the same time, the average annual rate of increase in chemical industrial production was 10.1 percent and in the state industries it was 6 percent.) The rate, which greatly surpassed the chemical and other industrial averages, was mostly due to favorable changes in the sources of production capacity or rather to their more effective utilization. But a role has also been played by the increase in the cash market and in foreign orders.

#### Provision of Personnel Requirements, the Increase in Work Productivity

Various "personnel" factors have also greatly contributed to the rapid development of the pharmaceutical industry.

In contrast to the averages of the state industry, there has been a relatively significant increase in the number of employees in the pharmaceutical industry during the 7 years under examination. While these numbers are largely identical in 1977 with those in 1970 in all state industries, with a 7.6 percent increase in the chemical industry, there has been a 9.2 percent increase in personnel in the pharmaceutical industry during the same period.

Accordingly, in 1977, this branch of industry represented 22 percent of the chemical industry and 1.6 percent of the total industry.

This increase in personnel—and this is quite significant!--has been accompanied by an above average increase in productivity. Between 1970 and 1977, the volume of production per unit employee has increased by an annual average of 11.9 percent. This was higher by 2.9 and 5.8 percent points than in the chemical and total industries, respectively. Therefore, the increase in production was brought about mostly--by about 93 percent--by improved productivity.

#### Changes in Investments and Stationary Installations

Begun during the previous decade, large scale reconstruction has been continued in the pharmaceutical industry during the 1970's. Production capacities for non-traditional pharmaceutical products have also been



established and expanded, and investments have been made to establish capacities for the introduction of new products. The monetary value of investments made in the pharmaceutical industry between 1970 and 1977 approached 7.5 billion forints at current valuation. This amount represents 10.2 percent of the total investments of the chemical industry and 1.9 percent of that of all Socialist industry. Table 1 gives an overview of the material-technical composition of investments put into action during the period under study.

Table 1

Material-Technical Composition of Investments Put Into Operation in the Pharmaceutical Industry 1970-1977 (based on comparable price data) (in %)

Designation	1970-1975	1976-1977	1970-1977
Construction	30.1	21.4	27.4
Machines, total	64.1	76.0	67.8
Of these: domestic machines	40.9	54.3	42.3
imported machines	23.2	30.7	25.5
Other	5.8	2.6	4.8
Total investments put into operation	100.0	100.0	100.0

As can be seen from the table, of the investments put into operation by the pharmaceutical industry between 1970 and 1977, 27.4 percent represented buildings and construction. This ratio is 3.2 percent lower than the average of the chemical industry and 7.3 percent lower than that of all industries. At the same time, machine investment exceeded the average of the chemical and trade industries by 8.0 and 9.1 percent, respectively.

In addition to the expansion and development of sections of the pharmaceutical industry producing basic materials--which also has promoted the increase in capitalist export--considerable investments have been made to expand the manufacture of nutriment and feed supplements. The most important among them are:

--at Chinoin: modernization of the fermentation plant with an expenditure of 200 million forints.

--at the United Pharmaceutical and Nutriment Factory (EGYT): expansion of the Dopegyt basic material-production capacity as well as of the Halidor works, with a value of about 600 million forints;

--for the Pharmaceutical Factory of Kobanya: the basic material-producing hall being built in Dorog;

--For Phylaxia: a feed supplement factory being built in Karcag and for EGYT, a nutriment factory in Kormend.

The pharmaceutical industry can maintain and expand its export possibilities in the socialist area only if it establishes new finishing and packaging capacities and reconstructs the existing ones in order to satisfy the increased qualitative demands toward ready-made pharmaceuticals. Accordingly, in the Pharmaceutical Factory of Kobanya, the so-called RKG plant is under construction. It will have an investment cost of 2 billion forints and nearly half of it is projected to be in operation by the end of the Fifth Five-Year-Plan. At Chinoín, reconstruction of the finishing and packaging plant has been accomplished at a cost of 150 million forints.

A well-developed finishing-packaging activity is equally a basic requirement for the expansion of our ready-made medicinal export to capitalist countries. The data in Table 2 reflect the advances made in the mechanization of drug finishing, as a result of investments.

Table 2

Ratio of Machine Finished Pharmaceutical Products, 1970-1977			
Designation	1970	(in %)	
		1975	1977
Pharmaceutical industry, total	64.4	74.2	82.5
Within it: Chinoín Pharmaceutical and Chemical Products Factory, Corp.	58.1	64.7	75.7
EGYT Pharmacochemical Factory	59.0	85.3	95.6
Pharmaceutical Factory of Kobanya	91.3	88.6	91.5

As a result of the investments, the capital equipment of the pharmaceutical companies has increased considerably since 1970. In 1977 the gross value of the equipment was 86.6 percent higher than 7 years earlier. Mentioned in comparison: the gross value of capital equipment in the chemical industry was 98 percent higher, in all state industries 68.4 percent higher in 1977 than in 1970. Within the total of capital equipment, the gross value of machines and installations has undergone a higher than average increase, 100.5 percent, in the pharmaceutical industry.

As a result of significant machine investments, the level of technical equipment for the work and the mechanization of production have improved considerably. In 1977 the per capita stationary machine equipment in the pharmaceutical industry was higher by 83.6 percent than in 1970. This index was lower in the chemical and state industries: 81.1 and 76.0 percent respectively.

In contrast to other branches of industry, the effectiveness of stationary equipment has improved between 1970 and 1977 in the pharmaceutical industry. In 1977 the production per unit stationary equipment was 28.4 percent higher than in 1970 in the pharmaceutical industry. In contrast, it was 1.0 percent lower in the chemical industry and 10.5 percent lower in the state industry.

## 2. Possibilities and Problems of Specialization, Changes in Domestic Specialization and in the Product Structure

When analyzing the possibilities and levels of specialization among companies of a given branch and, in a related evaluation of the production and product structure of the companies, we must start with the peculiarities of a given branch derived from the characteristics of the technology and the raw materials used. This has also been done in my examination of the pharmaceutical industry keeping in mind the following:

--In the pharmaceutical industry, the special character of the product--medicines--presents strict quality requirements toward both the production process and the product. The peculiar area of utilization of the medicines necessitates the availability of a very broad selection. This is caused by the property of pathogens to "get used" to a given medicine after prolonged use, or detrimental side effects may appear. With the advancement of science, however, newer and more effective medicines appear continually with less and less side effects. These result in a so-called average lifespan of 10-15 years for medicines (and this is gradually decreasing.) Thus the rapid replacement of an already wide selection of products is characteristic.

--The wide choice of rapidly changing products, composed of small quantities, require a flexible production technology. Only a few products are suited for production in continuously running, single-product installations. Therefore, the technology of the pharmaceutical industry is decisively characterized by batch type (intermittent) production.

In the production of basic pharmaceutical materials three technologies are used: processing raw materials of plant or animal origin, fermentation and synthetic technologies. Flexibility is the most important characteristic of the production technology of active medicinal ingredients. Although only one process can be run in certain installations, after cleaning the apparatuses, a very wide choice of products can be made by resetting the installations and by modifying the sequence of the connections among them. This large degree of convertibility is mostly characteristic of synthetic production. However, the manufacture of several products in a given installation can also be accomplished within the other two technologies.

The finishing and packaging installations are also suited for the processing of several active ingredients into ready-made medicines.

--Parallel with the increasing inroads made in synthetic production procedures, the pharmaceutical industry is in an increasingly close relationship with the organic chemical industry. The organic intermediary products, obtained in the course of crude oil and coal processing by the organic chemical

industry, are the most important raw materials for the pharmaceutical industry. The choice of intermediary products available to the pharmaceutical industry and the degree of processing of the raw materials have a strong influence on the production structure of the pharmaceutical industry and on the complexity of the production processes. In the absence of pharmaceutical intermediates for purchase, the depth of active ingredient production is increased in the pharmaceutical factories.

Starting with the above mentioned points, let us examine the possible trends in the specialization of pharmaceutical factories. Let me note, however, that all three theoretical models to be introduced in the following also have disadvantages in addition to their advantages and that the dominance of a particular model in the pharmaceutical industry of a given nation is mainly determined by local conditions.

It is obvious that no producer of pharmaceuticals could undertake to have a choice of products encompassing all the areas of effectiveness and all types of medicines. He must choose the product he will produce, the technology he will employ and the processing steps he will incorporate. In accordance, the development of company specialization in the pharmaceutical industry can be accomplished in three directions. The producer may specialize:

- a) in a particular production technology;
  - b) in a certain phase of pharmaceutical manufacture;
  - c) in the manufacture of a few products or groups of products.
- a) Specialization according to type of technology

As mentioned earlier, the manufacture of pharmaceutical basic compounds (active compounds) can be accomplished using greatly different technologies. These are: the synthetic, the fermentation and the natural material-processing technologies. On this basis, theoretically, one can picture methods. However, these three types in their pure, exclusive form do not exist anywhere. Namely, such separation could be realized only if the branch would be under strongly centralized direction and research would be carried out not by the factories but by central institutes. Although the generally known arguments for technological specialization speak for such separation (for instance, more homogeneous basic material supply, increased production and guidance tasks, higher production volume, etc.) it would have the counter-effect that the pharmaceutical producer would be forced to give up its most important characteristic, its flexibility.

Today, when a considerable part of research activity is being carried out in the factories, no producer can afford not to be able to manufacture a new drug, developed at considerable costs, exclusively because of technological limitations. The pharmaceutical factory which is set up to use only one technology excludes itself from the manufacture of that new, possibly very remunerative product which requires some other technology.



The strong market competition characteristic of the pharmaceutical industry and the rapid change of products demands flexibility from the pharmaceutical manufacturing technology. This is a hindrance to technological specialization primarily in the capitalist countries but also in most of the Socialist countries. The Soviet Union is an exception where synthetic drug manufacture and fermentation technology form two sub-branches of pharmaceutical production. This is broadened by a third, vitamin manufacture. The cause of this is the great absorption capacity of the Soviet market and the endeavor to insure the supply for the population of types of drugs which can be manufactured in large volume.

b) Specialization in basic material manufacture and in finishing-packaging activity

In the pharmaceutical industry, the second possible trend for specialization among the companies is the one directed at two different phases of pharmaceutical production: manufacture of basic materials and finishing-packaging. Manufacture of the basic material and production of the ready drug are two technological phases significantly different and separate from each other. While one requires the performance of definite chemical operations, the second is a physical-mechanical process resulting in a changed state and form of the basic material. The separation of production phases among the companies could be justified on the basis of their divergent character, installation and labor requirement, as well as the very broad choice of forms for ready drugs and packaging. It would be economical to perform similar forms of finishing-packaging (for example: injection or tablet manufacture) concentrated in a single location instead of every company making various ready drugs from its own basic materials. Nevertheless, the two phases do not separate for the following reasons:

--Many basic pharmaceutical materials are difficult or impossible to transport.

--This holds true equally for some of the ready drugs as well. Namely, their unpackaged transport could damage the product.

--Of primary importance is the achievement of qualitative and hygienic standard requirements associated with pharmaceuticals. In this interest, not only the basic material production but also the finishing-packaging processes are under strict controls. The present quality control system protects the interest of the consumers but it also makes a separation of basic material production and finishing-packaging operations cumbersome.

These factors make it more difficult but do not exclude the achievement of specialization which would undoubtedly result in considerable savings. In the Soviet Union, for example, a considerable part of the finishing-packaging activities are carried out in special plants, separated from basic material production.

### c) Specialization according to products

In this form of specialization, the companies could specialize in the production of a defined number of products (group of products.) A given group of products are drugs of related action belonging to the same area of effectiveness (for example: pain killers, drugs affecting the central nervous system, circulation, etc.) Specialization by the company in a few, selected areas of effectiveness is supported by numerous factors. The advantages of selecting products on the basis of their pharmacodynamic properties are apparent not only in the area of production but also in the areas of development, research and propaganda. For instance, restricting research activities to a few areas of effectiveness is an indispensable prerequisite for the effectiveness of company research. In research and testing, the accumulation of many years of experience in a given pharmacodynamic area as well as the "goodwill" which develops in medical specialist circles toward the company mean much more to the manufacturer than the monetary advantages.

There are pharmacodynamic areas (for example antinflammatory drugs) which are directed at the treatment of quite frequent, widespread diseases and these diseases are widely divergent in their effects and appearances. In these areas the research aspects may require more detailed specialization within the given pharmacodynamic area. In the case of some other pharmacodynamic groups, the identical effect can be achieved with drugs of different composition. In these cases specialization would be not in terms of pharmacodynamics but on the basis of the group of compounds: The manufacturer is engaged in the research and production of one or a few groups of compounds within the given pharmacodynamic circle.

### Specialization in the Hungarian Pharmaceutical Industry

Following the description of theoretically possible directions in specialization I shall discuss the characteristics of the specialization of the domestic pharmaceutical industry on the basis of the viewpoints discussed.

a) In the Hungarian pharmaceutical industry, a specialization according to type of technology did not develop. In general, the pharmaceutical companies do not specialize their production on the basis of the technologies used and they have installations suitable for carrying out several types of production technologies for basic materials.

--The five pharmaceutical factories--Chinoïn, EGYT, Pharmaceutical Factory of Kobanya, Alkaloida and Biogal--forming the backbone of pharmaceutical production all have synthetic manufacturing capacities;

--As a result of the development of fermentation capacities, four companies are engaged in pharmaceutical production based on fermentation technology;

--Alkaloida was originally started as a factory specializing in the processing of raw materials from plants but, because of fluctuations in raw material supply, the manufacture of morphine and of other alkaloids alone did not

prove to be sufficient and economical. In order to increase economic stability, in addition to retaining and further developing their original plant-chemical profile, they also started synthetic production. The product composition has already shifted in favor of the latter;

--Finally: the Pharmaceutical Factory of Kobanya has a plant-chemical profile and it also processes raw materials of animal origin. Thus, in this factory, all three technological types of pharmaceutical manufacture are available.

b) The second variety of specialization according to which the producer may specialize in certain phases of production--basic material production and finishing-packaging activities--also failed to materialize in our country. The basic materials produced by the factories are formed into the final product using their own finishing-packaging capacities in spite of the fact that there had been initiatives to establish finishing-packaging capacities which would be destined to satisfy the demands of the entire branch. As a result, Alkaloida and Biogal have finishing-packaging capacities which could also process the basic materials produced by the other factories. The sale and marketing of drugs prepared from active ingredients supplied by another firm would be the task of the finishing-packaging company. However, for Alkaloida--this company has the most significant excess of finishing-packaging capacities--the utilization of these capacities is a steady source of worry. Namely it presents problems that the other companies are understandably reluctant to give up the manufacture of a product which can be made economically and sold at a profit.

c) When analyzing the accomplishment of specialization according to products, it must be made clear whether the companies are studied according to their specialization in terms of the pharmacodynamic aspect or in terms of a deeper one involving certain partial pharmacodynamic areas. The 7th Pharmacopeia lists 22 pharmacodynamic groups and 120 partial areas.

Studying them on the basis of the above list, it can be concluded that the pharmacodynamic profile of the five pharmacological factories is very diverse. They produce drugs belonging to the following:

Alkaloida	17 main and 29 partial pharmacodynamic areas
Biogal	16 main and 32 partial pharmacodynamic areas
Chinoïn	21 main and 62 partial pharmacodynamic areas
EGYT	21 main and 61 partial pharmacodynamic areas
Pharm. Fact. of Kobanya	19 main and 67 partial pharmacodynamic areas.

In half of the 22 pharmacodynamic groups listed in the Pharmacopeia, 11 pharmacodynamic areas, all five factories manufacture products. There are 3 pharmacodynamic groups in which four producers make drugs, 7 groups with three producers and 1 group with two producers. Thus no specialization whatsoever is realized among the pharmaceutical companies in half of the pharmacodynamic groups and there is not a single pharmacodynamic group which would be the speciality of one company.

By further dividing the pharmacodynamic groups we arrive at the partial areas also referred to as subgroups. When we examine specialization in terms of these, then there remain only three pharmacodynamic subgroups in which the products of all five companies are represented. In 16 subgroups we find drugs produced by 4 companies, in 17 by 3, in 32 by 2 companies. Complete specialization is realized in 52 pharmacodynamic subgroups. The products of only one manufacturer appear in these which represent 43 percent of the total of partial subgroups.

Summarizing the previous discussion, it can be concluded that, in the Hungarian pharmaceutical industry, specialization among the companies with respect to technologies and the individual phases of drug manufacture did not develop at all and there is little specialization according to groups of products. By necessity this results in few possibilities for cooperation among the companies. The deliveries among companies are insignificant, amounting to only 2 to 3 percent of the production value of the branch.

Concerning the choice of products and the massive nature of production, it can be stated that the choice of all five Hungarian pharmaceutical companies encompasses relatively large number of drugs types, 3 to 4-fold larger than of foreign companies of comparable size. Within the choice of products, a nearly identical fraction of drugs is produced in large and moderate volumes and a similar or higher fraction (between 22.8 and 41.8 percent) of products is made in small volumes.

The wide choice of products by the pharmaceutical companies and within this the production of many drugs in small volumes is primarily due to the fact that, in the manufacture of drugs, the economic aspects of production must understandably be subordinated to health requirements in many instances. Thus production must be maintained also of those drugs which, although uneconomical, satisfy existing demand. Domestic supply cannot be made dependent on eventually uncertain foreign import.

The problem of economical order of magnitude of production is closely related to stepping up specialization. In order to enable the Hungarian pharmaceutical factories to decrease their range of products and to increase their production volume, segmentation and specialization according to products must be increased at the level of the entire pharmaceutical industry and also among the companies.

Distribution of labor, to be achieved with Socialist countries, may bring considerable results in the development of specialization for our pharmaceutical industry. Based on the analysis of about 1,000 products, the CEMA (Council for Mutual Economic Assistance) Permanent Committee of the Chemical Industry's Pharmaceutical Work Group designated 230 drugs which would lend themselves to the development of specialization among countries. These are products currently made in small amounts by each country and which are in demand in every member country. Thus, instead of a fractionation of production, production should be concentrated in a single country (company) in the interest of an economical production volume. Advances in this direction are expected in the years to come.



Cooperation among domestic companies could also contribute to the development of a more economical product structure. It appears practicable that the companies should increase their specialization in terms of products, sharing among themselves in a reasonable manner the profiles with respect to pharmacodynamics. This would result in a discontinuance of parallel manufacture of products having comparable medical purpose. In addition, a reasoned choice within a given group of products would also increase production economy.

In connection with the previous considerations, a concentration of research activities would also be necessary to decrease research costs which are high and are on the increase.

Another area of work distribution among companies is the finishing-packaging activity already mentioned. Currently the ready forms of medicines are mostly prepared by every company itself and the investments projected for the ensuing plan period are also accomplished according to companies. True advance in development and modernization would be made if the new and large capacity finishing-packaging plants would be set up by joint investment from the companies. Because of the cooperation, this would also insure a more continuous utilization of the installations.

#### Changes in the Product Structure of the Hungarian Pharmaceutical Industry

Similarly to other countries with well-developed pharmaceutical industries, traditional pharmaceutical products represent a lessening part of production while increasing stress is being put on the manufacture of products supplementing the basic production profile (human and animal nutriment, veterinary products, fodder supplements and agricultural chemical products.) (Table 3)

Table 3  
Changes in Product Structure in the  
Pharmaceutical Industry 1970-1977

Designation	Distribution of production			Production in 1977 expressed as percent of 1970 production
	1970	1975	1977	
Basic pharmaceutical materials	21.3	16.3	16.7	184.4
Packaged medicines	53.5	49.6	47.9	211.1
Serobacteriological products	3.1	2.0	2.0	150.1
Medicines total	77.9	67.9	66.6	201.3
Packaged human nutriment	0.4	1.4	1.1	744.0
Packaged animal feeds	4.3	7.7	8.2	444.2
Feed supplements	7.0	6.4	7.8	261.3
Insecticides	0.1	7.7	8.8	16.7-fold
Other products	10.3	8.9	7.5	173.0
Production total	100.0	100.0	100.0	235.5

The modification of the production structure, as presented, has been associated with several important decisions and has been fundamentally related to the large increase in domestic demands for non-traditional products of the pharmaceutical industry:

--For instance, following the appearance of the resolution on population policy, there was sudden increase in demand for infant food. Accordingly, the manufacture of human nutriments has undergone a more than 7-fold increase between 1970 and 1977;

--In association with the meat program, the demand for animals feeds and fodder supplements has increased considerably. Production of animal feeds increased 344.2 percent, that of fodder supplements increased 161.3 percent during the period studied;

--In accordance with the rapidly increasing agricultural demands every year, a production increase in insecticides was formulated in the Fifth Five-Year-Plan as one of the particularly important tasks of the chemical industry. This effort is reflected by the dynamic expansion of insecticide production and also by its increased share within the total pharmaceutical production (0.1 percent in 1970; 7.5 percent in 1975; 8.7 percent in 1977.)

--Nutriments, fodder supplements and agricultural chemical products represented 11.8 percent of the pharmaceutical industrial production in 1970. By 1977 this figure was 25.8 percent.

In addition to the increased stress on non-traditional pharmaceutical products, the structure of drug production has also undergone considerable change.

A decisive role has been played by production specializations and by bilateral cooperation agreements between Hungary and the socialist countries, within the framework of CEMA. On the basis of production specialization and mutual supply agreements, the domestic pharmaceutical companies have already transferred to other Socialist countries the manufacture of several products--which had been produced in uneconomical quantities by us--(for instance vitamine C, Istopyrin, Algopyrin, Amidazophen, Barbamid, Antineuralgica, Demalgon.) The production capacities thus liberated made possible a considerable increase in the production of new, potent, modern drugs and they serve to broaden the product base which can be exported economically.

Thus the structure of pharmaceutical production has undergone considerable modification since 1970 and the current rate of revival can also be termed dynamic. Mass production of 67 new products was started in 1977 about half of which were traditional pharmaceutical products.

In summary it can be concluded that the manufacture of products belonging to the traditional pharmaceutical profile has increased in absolute numbers but decreased in its ratio of production. This was caused by diversification of pharmaceutical industrial production, by increased stress on the manufacture of products not in the pharmaceutical profile. We come to the same conclusion based on studying the production branch of pharmaceutical industrial product structure (Table 4.)

Table 4

## Production Branch Distribution of Pharmaceutical Industrial Production, 1970-1977

Index number	<u>Production branch</u> designation	<u>Distribution (percent)</u>		
		1970	1975	1977
1615-01	Production of pharmaceutical basic materials and compounds	77.2	68.5	66.8
1615-02	Production of animal medicines and feeds	12.4	14.9	16.9
1615-03	Fine chemical production	2.8	1.5	1.6
1611-02	Insecticide production	0.1	7.7	8.8
	Other production branch not listed	7.5	7.4	5.9
	Total production branches	100.0	100.0	100.0

Based on studying the production branch structure between 1970 and 1977, a two-directional tendency can be observed in the pharmaceutical industry. On the one hand, the already mentioned broadening profile (ratio of insecticide production increased from 0.1 percent to 8.8 percent), on the other hand, a shift in the ratio within the pharmaceutical industrial production branches (increase in the ratio of animal medicines and feeds from 12.4 to 16.9 percent and a decrease in the ratio of pharmaceutical basic materials and products as well as of fine chemical products from 77.2 to 66.8 percent and from 2.8 to 1.6 percent, respectively) has taken place.

### 3. Sale of Pharmacological Industrial Products

In accordance with the dynamic increase in production, the sales of pharmaceutical companies have increased significantly every year since 1970, to an extent far surpassing the chemical and state industries as a whole. Calculated in comparable prices, the 1977 sales exceeded the 1970 sales by 145.5 percent in the pharmaceutical industry, by 84.8 percent in the chemical industry and by 47.7 percent in the state industry. The data characterizing the principal trends of sales are presented in table 5.

The high degree of export orientation of the pharmaceutical industry is demonstrated by the fact that more than half of its sales are made in foreign countries. Compared to the 1970 level--calculated in unchanged prices--by 1977 the export has increased 133.4 percent with a corresponding average annual growth rate of 12.9 percent.

Table 5

Sales Distribution of Pharmaceutical Industrial Production  
According to the Principal Trends in Sales 1970-1977\*

Designation of the sales trend	Distribution of sales (percent)		
	1970	1975	1977
Domestic sales	39.7	43.6	43.3
Foreign buyer	60.3	55.2	56.6
Of these: Ruble exchange	41.5	36.1	35.3
Non-ruble exchange	18.8	19.1	21.3
Foreign trade company	0.0	1.2	0.1
Total sales	100.0	100.0	100.0

\*based on basic activity data

Although the pharmaceutical industrial export is dynamic, its share in total sales has decreased. In studying the changes in ratios within the sales trends, it can be concluded on the basis of the previous data that the ratio of foreign trade transactions was 60.3 percent in 1970 as opposed to 56.7 percent in 1977. At the same time, domestic sales increased from 39.7 percent to 43.3 percent. This was related to the change in production structure and, within this, to the considerable increase of the share of non-traditional pharmaceutical industrial products. Namely, the production increase in nutriments and fodder supplements in its entirety served to satisfy domestic demands and insecticide export was also not significant until 1976. (Of the insecticides produced in 1977, considerable part, 60 percent, was exported.)

Within the total export of the pharmaceutical industry, the ratio of sales on the non-ruble exchange markets has undergone a gradual increase during the period studied (from 18.8 to 21.3 percent of total sales) while the share of ruble exchange export has decreased from 41.5 to 35.3 percent.

The composition of pharmaceutical export--considering the ratio of packaged products and basic materials--has remained essentially unchanged since 1970.

A study of our pharmaceutical export in terms of exchanges reveals that more than three-fourths of its was directed to countries with a ruble exchange and, within this, the ratio of packaged medicines was dominant (about 93 percent.) The non-ruble exchange medicine export was nearly one-fourth of our total medicine export. With respect to composition, basic materials had the decisive share, almost 92 percent.

In order to maintain an unbroken trend in export increase, a series of important tasks have to be fulfilled in the pharmaceutical industry, mainly by accomplishing the following:



--There must be a continued increase in the ratio of modern products and, within these, of original preparations (because these ensure excess income on foreign markets.) At the same time, the manufacture of outdated products must be discontinued;

--The ratio of packaged medicines should be increased in the capitalist export. Toward this goal, the finishing-packaging activity must be further developed;

--The level of foreign economic activity must be increased through cooperations in production, technical and scientific collaboration, and better market research activity.

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